



City of Houston

Annise D. Parker
City Controller

Steve Schoonover
City Auditor

Public Works and Engineering Department Storm Water Management Program

Process Review

Report No. 2009-20



OFFICE OF THE CITY CONTROLLER
CITY OF HOUSTON
TEXAS

ANNISE D. PARKER

December 18, 2008

The Honorable Bill White, Mayor
City of Houston, Texas

SUBJECT: Public Works and Engineering Department
Storm Water Management Program Process Review - Report No. 2009-20

Dear Mayor White:

In accordance with the City's contract with Jefferson Wells International, Inc. (JWI), JWI has completed a Process Review of the Public Works and Engineering Department's (PW&E) Storm Water Management Program (SWMP). The primary objectives of the engagement included:

- Determining whether Turner, Collie, & Braden (TCB), the engineering design and project management contractor, was performing in compliance with contract terms.
- Assessing the coordination, effectiveness, and efficiencies of construction management for selected construction projects performed either by PW&E or outsourced to a third party construction manager.
- Identifying recommendations and cost savings, if any, related to improving the coordination, effectiveness, and efficiencies related to the SWMP processes and procedures.

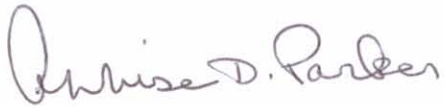
The report, attached for your review, identified various opportunities for improving the coordination, effectiveness, and efficiencies related to the SWMP processes and procedures. One of the conclusions noted by JWI was that the utilization of TCB to manage the SWMP allows the City to maintain efficient oversight of the various SWMP projects with existing PW&E resources while retaining control over projects selected and payments made to construction management firms and construction contractors.

The results and recommendations identified during the review are included in the body of the report. Four of the five recommendations noted were addressed by PW&E management and the one remaining recommendation was forwarded to the Mayor's Office Affirmative Action and Contract Compliance Division (AACC) for resolution. Draft copies of the matters contained in the report were provided to PW&E and AACC officials. The Views of Responsible Officials as to actions being taken are appended to the report as Exhibits I (PW&E) and II (AACC).

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We appreciate the cooperation extended to the JWI engagement team by PW&E, AACC, and contractor personnel during the course of the review.

Respectfully submitted,

A handwritten signature in cursive script that reads "Annise D. Parker".

Annise D. Parker
City Controller

xc: City Council Members
Anthony Hall, Chief Administrative Officer
Michael Moore, Chief of Staff, Mayor's Office
Michael Marcotte, Director, Public Works and Engineering Department
Velma Laws, Director, Mayor's Office Affirmative Action and Contract Compliance Division
Michelle Mitchell, Director, Finance Department
Alfred Moran, Jr., Director, Administration and Regulatory Affairs Department

November 20, 2008

Controller Annise D. Parker
City Controller
City of Houston
901 Bagby, 8th Floor
Houston, Texas 77002

Dear Controller Parker:

We have completed our review of the Public Works and Engineering Department's Storm Water Management Program (SWMP) as outlined in our engagement letter dated August 27, 2007, under Contract No. 56545.

Our observations and recommendations noted during the performance of the review are presented in this report. Our procedures, which accomplished the project objectives, were performed through March 31, 2008 and have not been updated since that date. Our observations included in this report are the only matters that came to our attention, based on the procedures performed.

All data used during this review was obtained from representatives of the City of Houston Public Works and Engineering Department, the City of Houston Office of the City Controller or from the contractors reviewed including Turner Collie & Braden, Carter & Burgess, Inc., ATSER and SES Horizon Consulting Engineers. Our work does not constitute an audit conducted in accordance with generally accepted auditing standards, an examination of internal controls or other attestation or review services in accordance with standards established by the American Institute of Certified Public Accountants (AICPA). Accordingly, we do not express an opinion or any other form of assurance on the reporting or compliance of the City of Houston Public Works and Engineering Department.

Jefferson Wells is pleased to have assisted the City Controller, and we appreciate the cooperation received during this engagement from the City of Houston Public Works and Engineering Department, the City of Houston Affirmative Action and Contract Compliance Division, as well as your office.

This report is intended solely for the information and use of the City, the City of Houston Public Works and Engineering Department and the City Controller's Office, and is not intended to be used for any other purpose.



Eric Bruce
Director – Internal Controls

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VIEWS OF RESPONSIBLE OFFICIALS

Department of Public Works and Engineering Exhibit I
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EXECUTIVE SUMMARY

Engagement Objectives

Jefferson Wells was retained to perform an independent process review of the City of Houston (the City) Public Works and Engineering Department's (PWE's) Storm Water Management Program (SWMP). Our primary objectives included the following:

- Determining whether Turner, Collie & Braden (TCB), the engineering design and project management contractor, was performing in compliance with contract terms.
- Assessing the coordination, effectiveness, and efficiencies of construction management for selected construction projects performed either by PWE or outsourced to a third party construction manager.
- Identifying recommendations and cost savings, if any, related to improving the coordination, effectiveness and efficiencies related to the SWMP processes and procedures.

Scope

Our review includes invoices from the inception of the SWMP in December 2003 through June 2007. Included in the review were contracts, invoices and other related documentation from TCB and selected construction, construction management, and testing and inspection firms that provided services as part of the SWMP.

Background

On June 8th and 9th of 2001, the Houston area received approximately 39 inches of rain from Tropical Storm Allison, killing 22 people, flooding over 70,000 homes, a portion of downtown, the Texas Medical Center, and causing over \$5 billion in damage.

During April 2002, as part of the response to Tropical Storm Allison, the City amended a previous contract with J.F Thompson, Inc., formerly known as Thompson Professional Group, Inc. (Thompson), which provided professional engineering services for a Comprehensive Drainage Study. The amended contract added provisions for design and construction management in order to implement recommended actions from the Comprehensive Drainage Study. In December 2003, the City entered into another agreement with Thompson to provide project management of the SWMP.

In addition to the contracts with Thompson, now known as Turner, Collie and Braden, the City, in December 2003, received a federal grant from the Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP). This grant funded three Harris Gully drainage projects located in the Texas Medical Center area and provided for reimbursement for up to 75% of eligible costs. Originally, the federal share amount of these grants totaled \$45,750,000. The three projects funded by the federal grant include the completed Hermann Drive and McGregor Drive projects, along with the Kirby Drive project which is currently under construction. Additionally, several City-Wide neighborhoods were also selected for improvement under the SWMP. These projects are funded solely by the City.

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While as part of the City's rolling 5 year Capital Improvement Plan, PWE continues to be responsible for the overall implementation of design and construction infrastructure projects for the City as a whole. The SWMP term is specifically used to characterize drainage projects designed as part of the TCB contract and the related FEMA-funded projects discussed above. The SWMP is administered by members of the PWE, Engineering & Construction Division, Engineering Branch, Storm Water Section (Storm Water Section).

Per the City's SWMP website (www.swmp.org), "the SWMP supports the City in its implementation of City-Wide storm water drainage improvements and management practices. The SWMP designs and constructs capital improvement projects in order to provide increased levels of flood protection for the City and its citizens.

Specific work efforts within the SWMP include:

- The implementation of storm drainage improvements to the Texas Medical Center (TMC) and various neighborhood storm drainage improvement projects
- Floodplain Management
- Support of the City's participation in the National Flood Insurance Program
- The City's Comprehensive Drainage Plan."

As part of its contract with the City to provide project management of the SWMP, TCB provides the City with both weekly progress reports on the status of Storm Water design and construction in progress (CIP) projects and a monthly status update meeting for the overall program.

The SWMP has annual appropriations of approximately \$50 million. The majority of the annual appropriation, approximately \$45 million, is for actual construction expenses, some of which are directly managed by TCB with the remainder managed by PWE project managers or other hired construction managers. The remainder of the annual appropriation, approximately \$5 million, is paid directly to TCB for ongoing program management, design, and technical support and includes pass-through dollars paid to sub-consultants managed by TCB on design projects.

Approach

In accomplishing the objectives of this review, we performed the following activities:

Turner Collie & Braden

- Interviewed TCB management to assess PWE's coordination, effectiveness, and efficiencies related to SWMP processes and procedures.
- Obtained detail of invoices related to the SWMP provided by TCB from inception in December 2003 through June 30, 2007.
- Selected a sample of above invoices to test for proper management review and approval controls across the significant areas of: (1) Program Management &

EXECUTIVE SUMMARY

- Technical Services, (2) Design Services, (3) Construction Phase Services, (4) Construction Management Services, and (5) Floodplain Management.
- Reviewed the TCB contracts and change orders noting key terms and conditions.
 - Verified through observation, review of information and discussions/meetings with PWE SWMP employees whether TCB services were provided in accordance with contract terms.
 - Verified whether evidence of TCB insurance coverage had been obtained by the Storm Water Section and that such coverage was being maintained.
 - Verified whether evidence of TCB Performance Bonds had been obtained by the Storm Water Section and that adequate bond coverage was being maintained.
 - Verified whether MWBE compliance participation was being monitored by the Storm Water Section in conjunction with the Mayor's Office Affirmative Action and Contract Compliance Division (AACC).

SWMP Projects and Related Construction Management Firms

Based on the selection process discussed in the following section, for each of the projects selected, we performed the following activities:

- Interviewed respective non-City construction management firms to assess PWE's coordination, effectiveness, and efficiencies related to SWMP processes and procedures.
- Reviewed construction contracts, amendments, and change orders for proper approvals/authorizations.
- Reviewed construction contractor invoices to test whether they were properly reviewed and approved by the appropriate PWE-assigned or contracted third-party construction manager and other appropriate signatories prior to payment.
- Determined whether construction contractor-provided certified payrolls were properly submitted to the AACC if required by contract.
- Reviewed contract and change orders noting key terms and conditions.
- Verified through observation, review of information and discussions/meetings with SWMP employees whether services were provided in accordance with contract terms.
- Verified whether evidence of insurance coverage had been obtained by the Storm Water Section and that such coverage was being maintained.
- Verified whether evidence of Performance Bonds had been obtained by the Storm Water Section and adequate bond coverage was being maintained.
- Verified whether MWBE compliance participation was being monitored by the Storm Water Section in conjunction with the AACC.

EXECUTIVE SUMMARY

Selection of SWMP Projects and Related Construction Management Firms

Projects are considered to be SWMP programs if included in the City’s amended contract C52534 with TCB to provide for design and construction management (CM) in order to implement recommended actions from the Comprehensive Drainage Study. In addition, these projects were discussed during the monthly updates provided by TCB to PWE and included in the monthly agenda reports provided by TCB to the City.

We noted that prior to implementation of SAP by the City effective July 1, 2006, the City utilized AFMS as its financial management system. The Project Expenditure Summary Report (PJ529M) was a report generated by AFMS which captured all inception-to-date drainage project expenditures. As of June 30, 2006, we noted that per the PJ529M, actual expenditures inception-to-date for all City drainage projects totaled over \$302 million. Total PJ529M actual expenditures inception-to-date for projects included in the rolling 5 year 2007-2011 Capital Improvement Plan City of Houston – Storm Drainage plan totaled \$138 million, of which \$114 million is considered to be SWMP projects. The remaining \$24 million was considered to be local drainage improvement projects not related to the SWMP program. The \$114 million is inclusive of both amounts paid directly to TCB and amounts paid directly to construction managers/contractors. Per the PJ529M report, the total amount paid to TCB through June 30, 2006 was \$30.3 million. We also noted an additional \$6.5 million was paid to TCB between July 1, 2006 and August 2007 (for services incurred through June 30, 2007).

As part of the selection process for projects to perform compliance testwork, we reviewed the January 29, 2007 SWMP agenda prepared by TCB to identify SWMP projects. In addition, a Storm Water Section Supervising Engineer provided a list of the respective Construction Managers for the projects totaling the \$114 million discussed above. Based on identification of SWMP projects and related CM firms, we selected a sample of four projects for which to perform compliance test work. Criteria for selection included expenditures through June 30, 2006 and ensuring that projects managed directly by PWE Construction Branch and projects outsourced to a third party construction manager were selected. The four projects selected were as follows:

Table 1 – Detail of Projects Selected

Project	Description	Construction Manager Selected	PJ529M Expenditures through June 30, 2006
1) M-0254	Timbergrove	City of Houston	\$5,579,000
2) M-0255	Braes Blvd.	Carter & Burgess	\$4,038,000
3) M-0771	Kirby Drive Segment Two	ATSER	\$15,193,000
4) M-0260	Texas Medical Center – Hermann Drive Segment Two	SES Horizon Consulting Engineers	\$35,126,000
		Subtotal of four projects selected	\$59,936,000

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We further noted that the AFMS PJ529M expenditures include the following phases:

Table 2 – AFMS Construction Contract Phases

AFMS Construction Contract Phases	
1	Acquisition
2	Design
3	Construction
4	Equipment
5	Other
6	Legal Cost Recovery
7	Design Cost Recovery
8	Construction Cost Recovery
9	Real Estate Cost Recovery

Our procedures for the four projects selected were limited to the expenditures related to Phase 3 Construction. The following table details the expenditures selected for testwork for these four projects:

Table 3 – Expenditures Selected for the Selected Projects

Project	Description	PJ529M Expenditures through June 30, 2006	Phase 3 Expenditures Tested through June 30, 2006	Additional expenditures tested July 1, 2006 through June 30, 2007	Total Tested
1) M-0254	Timbergrove	\$5,579,000	\$5,267,000	\$2,878,000	\$8,145,000
2) M-0255	Braes Blvd.	\$4,038,000	\$3,894,000	\$5,305,000	\$9,199,000
3) M-0771	Kirby Drive Segment 2	\$15,193,000	\$14,693,000	\$7,142,000	\$21,835,000
4) M-0260	Texas Medical Center - Hermann Drive Segment 2	\$35,126,000	\$22,610,000	\$2,761,000	\$25,371,000
Subtotal of four projects		\$59,936,000 *	\$46,464,000	\$18,086,000	\$64,550,000

* matches Table 1

Overall Expenditures Subject to Testwork of Proper Management Review and Approval

In addition to the expenditures selected for testwork for the four projects discussed above, we also performed testwork of expenditures paid directly to TCB. The following table details the total expenditures subject to testwork of proper management review and approval controls for both TCB and the four projects selected.

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Table 4 – Overall Expenditures Selected for Testwork

Category	Expenditures tested through June 30, 2006	Additional expenditures tested July 1, 2006 through June 30, 2007	Total Tested
TCB *	\$30,337,000	\$6,541,000	\$36,878,000
Subtotal of four projects**	\$46,464,000	\$18,086,000	\$64,550,000
Total expenditures	\$76,801,000	\$24,627,000	\$101,428,000

* per the PJ529M report as of June 30, 2006

** matches Table 3

Based on the above, we noted that total expenditures subject to testwork included \$76.8 million of the \$114 million considered to be SWMP project expenditures as of June 30, 2006. An additional \$24.6 million of SWMP project expenditures incurred was tested for the period from July 1, 2006 to June 30, 2007.

EXECUTIVE SUMMARY

Summary of Conclusions

Objective

Determine whether TCB, the engineering design and project management contractor, was performing in compliance with contract terms.

Conclusions

- Based on our review of TCB pay estimates (invoices) as well as construction manager, construction contractor, and testing and inspection services pay estimates, we noted no significant issues with regard to the individuals signing in each respective signature block to indicate their review and approval. The City has a series of review and approval controls in place to ensure that no unauthorized payments are made and we found general compliance with those controls.
- The SWMP personnel have worked with TCB to develop a template to use for all monthly pay estimates that matches the amounts included in the Contract Summary for each individual project/task performed. This facilitates an efficient and accurate monthly invoicing process.
- Based on our review of TCB change orders, associated contract amendments, and supplemental appropriations, the Request for Council Action (RCA) documentation appeared to be complete and in proper form. The RCAs were appropriately supported with details of the requested change(s) in contract terms and conditions and/or additional funds required, and prepared and authorized by appropriate members of PWE management.

EXECUTIVE SUMMARY

Objective

Assess the coordination, effectiveness, and efficiencies of CM for selected construction projects performed either by PWE or outsourced to a third party construction manager.

Conclusions

- Utilization of TCB to manage the SWMP allows the City to maintain efficient oversight of the various SWMP projects with existing PWE resources while retaining control over projects selected and payments made to construction management firms and construction contractors.
- The City's Capital Improvement Project Management System (CIPMS) has been enhanced to allow for real-time uploads of daily construction activity through either a PDA hot-sync or upload via a laptop, providing greater efficiency and accuracy than the previous manual-entry methodology.
- Based on our review of executed performance, payment, and maintenance bonds of construction contractors selected, adequate bond coverage was obtained and maintained by the City without exception.
- Based on our review, MWBE compliance participation is being monitored by the AACC. Use of the on-line system has enhanced this process.

Summary of Recommendations

Objective

Identify recommendations and cost savings, if any, related to improving the coordination, effectiveness, and efficiencies related to the SWMP processes and procedures.

Recommendations

- **Communication of Final Approved Amounts for Monthly Pay Estimates**

PWE should work with its Accounts Payable group and/or the Information Technology Department to obtain read-only rights for the Assistant Project Managers (APMs) so they can determine both the date contractor-related pay estimates were paid and the final approved amount. This would allow the APMs to approve the pay estimates in the CIPMS system to ensure that all future changes are made on a go-forward basis only. This will improve the accuracy of CIPMS and minimize confusion and disputes that occasionally occur due to construction managers and inspectors approving outdated Daily Construction Reports (DCRs) throughout the month.

- **Inclusion of Certification of Payment to Subcontractors & Suppliers**

To ensure the City is protected from instances of a subcontractor claim that they were not properly compensated by a prime contractor operating as an agent of the City, we recommend that PWE continue their effort to locate Certifications of Payment to Subcontractors & Suppliers not included with the respective interim pay estimate packages. Going forward, PWE should ensure that these are received on a monthly basis before the pay estimates are approved.

- **Strengthen internal control requiring separate individuals to sign in different signature blocks on the Pay Estimate**

We recommend that the internal control requiring separate individuals to review and indicate approval through their signature in the appropriate signature block be consistently followed in order to fully realize the benefit of a check and balance control system.

- **Evidence of Insurance Coverage**

Evidence of insurance coverage for all contractually required types of insurance is inconsistently maintained by the Engineering & Construction Division. Lack of contractually required insurance coverage by a City contractor could expose the City to risk of loss in the event of an accident or incident on a jobsite.

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We recommend that the Engineering & Construction Division develop a database to track all contracts requiring Certificates of Insurance from contractors including types of required coverage, amounts of required coverage, insurer, insurer rating, period covered by most recent certificate date, and date of next required certificate. An individual, perhaps in Document Control, should be assigned to monitor the status of contractor Certificates of Insurance and coordinate with either the Project Managers or contractors to ensure that current Certificates of Insurance are on file within PWE at all times that project work is underway.

- **Complete the mapping of the legacy contract numbers used in AFMS to the new contract numbers used in SAP within the On-Line MWBE System**

We recommend that AACC continue to work with their B2G contractor to complete the mapping between the legacy 5-digit contract numbers used in the previous AFMS accounting system and the new 10-digit number used in SAP. That mapping will allow AACC to efficiently determine whether all individual contractor and subcontractor payments are captured by the on-line system and accurately verify MWBE participation percentage utilization.

Role of TCB in the SWMP Process

RESULTS AND RECOMMENDATIONS

Role of TCB in the SWMP Process

Based on discussion with representatives of TCB and PWE, we noted the following with regard to TCB's role in the SWMP process.

Assignment of SWMP Projects to TCB

Projects evolve from the City's Comprehensive Drainage Plan (CDP). The CDP is an engineering analysis which contains information on existing storm sewer infrastructure and identifies locations for future improvement in the City's Capital Improvement Plan. The CDP makes a high level evaluation of existing infrastructure based on capacity, age, and area of the city. The CDP breaks down the City by drainage area and determines where deficiencies exist. TCB assists the City in prioritizing the needs and provides a high level cost estimate of potential projects compared to the number of residential addresses that would be served by the project. Using this analysis, the PWE Planning & Development Services Division determines which projects to pursue and includes them in the City's rolling 5 year Capital Improvement Plan. PWE executes the work and determines which projects are assigned to TCB under the SWMP and which projects to execute internally.

When PWE assigns projects to TCB, TCB drafts a supplement to the main contractual agreement with the City which in turn becomes an RCA. As projects move forward, if additional funds are needed for certain projects, these must be approved through a supplement to the contract. If rates or other contractual changes are needed, the changes take the form of an amendment to the contract.

Selection of Engineering Firms on SWMP Projects

On an annual basis, the City solicits qualifications from engineering firms to perform work on the selected SWMP projects. PWE selects the engineering consultants for the various SWMP projects and assigns them to TCB. TCB is then tasked with negotiating the contract with the assigned engineering consultant for each project. TCB compiles a Request for Proposal (RFP) package for the consultant to use in proposing on the project. The RFP describes the preliminary scope of the project and includes the format for the cost proposal, insurance and MWDBE requirements, and defines invoicing procedures. The engineering consultant then presents a formal proposal to the City which includes a budget and construction schedule based on the preliminary scope for their respective projects.

Concurrently, TCB prepares an "independent government estimate" for each project to use as a comparison to the submitted proposal. Differences between these two are negotiated. The City does not get involved until the scope, budget, and schedule have been agreed upon. After negotiation is complete, TCB prepares a "Work Authorization Request" which summarizes the proposal and sends it to PWE for approval. Once approved, this is attached to a letter from the City to TCB which serves as the "Notice to Proceed."

A subcontract agreement is then signed between TCB and the engineering firm.

RESULTS AND RECOMMENDATIONS

Monthly Invoicing by TCB to the City

After the professional services contract was executed between the City and Thompson, now known as TCB, the City provided TCB a template to use for all monthly Engineering/Architectural Services Contract Estimates for Payment (Pay Estimates).

The template included the GFS Number, File No., Project Description, Estimate No., Date from (period included in estimate), Contract No., Period, Consultant's Invoice No., Fund No., MWBE % Goal, MWBE % Utilization, Total Contract Days, and No. Days Utilized.

It also included the following for the Original Contract and all Supplemental allocations: Ordinance No., Date Passed, Ordinance Amount, and Contract Amount.

Additionally, it specified the overall allocation for the SWMP between the overall amount allocated for Contract Services and for Construction Administration, Management, and Inspection Services.

The Estimate for Payment then detailed the Total Amount Due This Estimate into the following categories:

- Program Management
- Design Services
- Construction Mgmt. and Inspection
- Floodplain Mgmt.
- Other Services

For each individual category, the following invoice information was also included: Total (invoiced) to Date, Previously Invoiced, Percent Invoiced to Date, and Amount Due (this Estimate.)

Each Estimate for Payment included the following signature blocks (with date):

- 1) Certification by firm
- 2) Received by Contract Administrator/Admin Assistant
- 3) Reviewed by Project Engineer/Project Manager for Floodplain Management
- 4) Approval Recommended Chief Engineer Construction Section
- 5) Reviewed by Project Engineer/Project Manager for Storm Water Management Program
- 6) Reviewed by Project Engineer/Project Manager Construction Section (not used)
- 7) Approval Recommended by Chief Engineer Design Section
- 8) Approved by Director of PWE

RESULTS AND RECOMMENDATIONS

Contract Summary

Each month, TCB also prepared a Contract Summary. Amounts included in the Contract Summary were agreed to both the totals included on the Estimate for Payment and the underlying invoice from TCB to the City.

The Contract Summary included the following information: Contract No., Project Description, WBS No., File No., City of Houston Estimate No., Consultant's Invoice No., Date, and Billing Period. It then identified each individual project within the following categories:

Federally Funded (TMC) Projects

Program Management Services
Technical Support and Services
Design Services
 Phase I
 Phase II
 Phase III
Construction Management

City Funded Projects

Program Services
Technical Support and Services
Design Services
 Phase I
 Phase II
 Phase III
City Engineer & Floodplain Management Support

For each individual category, the following information was presented: Percentage complete, Projected Amount, Authorization Date, Authorized Amount, Total to date, Previously Invoiced, Amount (due this period).

The Projected Amount by task was taken directly from the RCAs and the Authorization Date was taken straight from the respective "Notice to Proceed" letters. Amount (due this period) matched the totals included on the TCB invoice to the City.

TCB Invoice to the City

The monthly TCB invoice to the City matched the amounts included in the Contract Summary for each individual project/task but included a greater level of detail for each individual task and included supporting progress reports and subcontractor invoices.

RESULTS AND RECOMMENDATIONS

For tasks such as project management (both for Federally Funded (TMC) Projects and City Funded Projects, Construction Management Services provided by TCB, and City Engineer and Floodplain Management Support) the following information was included to calculate the total due for the period:

- detailed description of each role,
- hourly rate,
- contractually agreed multiplier applied to hourly rate, and
- hours incurred.

For each phase of Design Services provided by subcontractors, the following information was provided:

- Project Description within respective Phase,
- Total Contract Amount,
- Percentage complete,
- A calculated total to Date less Previously Invoiced, and
- Any contractually agreed upon markup.

In order to determine the percentage complete, the subcontractors submitted invoices containing their calculation of percentage of completion to the TCB designated Project Manager for approval. The percentages used were based on contractually defined milestones to be achieved for each respective project.

For Technical Support and Services, the following information was provided to calculate the total due for the period:

- Description of services
- detailed description of each role,
- hourly rate,
- multiplier, and
- hours incurred.

These were time and materials type services including special studies, modeling, investigations, etc. All Technical Support services required advance approval by the SWMP Project Manager. Advance approval consisted of either an approved proposal for services or in the case of an emergency situation, email approval from the SWMP Project Manager. In addition to the overall TCB invoice, TCB also provided the SWMP Project Manager with a package containing a narrative summary of Technical Support provided per City direction for the respective month supported by TCB timesheets.

The monthly invoice packages were hand delivered by the TCB program manager to the SWMP Project Manager.

RESULTS AND RECOMMENDATIONS

PWE Review of Invoices Submitted by TCB

In order to review and approve a TCB invoice we noted the following stages of review:

1) “Certification by firm” signature block

Signed by the TCB representative (Program Manager on the project) to indicate that the items represented in the invoice were accurate. The Certification by firm signature block on the Pay Estimate was already signed by TCB when this was submitted to the City.

2) “Received by Contract Administrator/Admin Assistant” signature block

Monthly invoices were hand delivered to either the Project Engineer/Project Manager for SWMP (SWMP PM) or directly to the Contract Administrator/Administrative Assistant (CA). If the SWMP PM received the invoice it was forwarded to the CA. The CA signed solely to indicate receipt of the invoice from TCB. The CA then logged the invoice into a separate tracking spreadsheet to indicate the date received, and then input the estimate number and amount of the pay estimate into a routing sheet. The CA then passed the invoice to a designated Storm Water Section individual who confirmed the validity of any time charged to local drainage projects included in the invoice and initialed these amounts directly on the invoice. The package was then passed back to the CA who passed it to the Project Engineer/Project Manager for Floodplain Management.

3) “Reviewed by Project Engineer/Project Manager for Floodplain Management” signature block

This individual confirmed the amounts included in the invoice charged to Floodplain Management and initialed these amounts directly on the invoice. If issues were noted, questions were directed to the Project Engineer/Project Manager for Storm Water Management. Once initialed, the package was then passed back to the CA who passed it to the Chief Engineer Construction Section.

4) “Approval Recommended Chief Engineer Construction Section” signature block

This individual confirmed the amounts included in the invoice charged to Construction Management and initialed those amounts directly on the invoice. Once initialed, the package was then passed back to the CA who passed it to the Project Engineer/Project Manager for Storm Water Management.

RESULTS AND RECOMMENDATIONS

5) “Reviewed by Project Engineer/Project Manager for Storm Water Management Program” signature block

Based on his day to day knowledge of the progress of each project and attendance at the monthly progress meeting for each project, the SWMP PM was responsible for reviewing both the Project Management and Design portions of the monthly invoice. Both the Federally Funded Projects Section and the City Funded Projects sections of the invoice were reviewed for the following:

- a. Program Management - reasonableness of hours charged by appropriate job classification description and determination if appropriate contractual rate is being billed for time and materials work.
- b. Design Services – TCB was responsible for negotiating contracts with their sub-consultants and the contract to perform the work was between TCB and the respective sub-consultant. Once an appropriate contract was negotiated, the City issued TCB a “Notice to Proceed” including an authorized amount for the project. This amount was included on the Estimate for Payment and billed as a percentage of completion type contract. As part of the SWMP PM’s review process, individual projects were reviewed to verify the reasonableness of the billed percentage completed.

The SWMP PM also reviewed the Technical Support and Services sections of the invoice. These were time and materials type services including special studies, modeling, investigations, etc. All Technical Support services required advance approval by the SWMP PM. Advance approval consisted of either an approved proposal for services or in the case of an emergency situation, email approval from the SWMP PM.

If the SWMP PM had questions or disagreement with any of the amounts included in the invoice, he had a discussion with TCB and requested them to re-invoice the City if necessary.

Once the Estimate for Payment was approved, the package was passed back to the CA who logged the date approved into the tracking spreadsheet and then forwarded the package to the Chief Engineer Design Section.

6) “Reviewed by Project Engineer/Project Manager Construction Section” signature block

This review was not applicable for this invoice type.

RESULTS AND RECOMMENDATIONS

7) “Approval recommended by Chief Engineer Design Section” signature block.

The Chief Engineer Design Section reviewed for the following:

- Spot checked authorization letters
- Reviewed for cost expended versus progress on the job
- Specific inquiries for unusual items were made to the Project Engineer/Project Manager for the SWMP.

Once the Estimate for Payment was approved, the package was passed back to the CA who logged the date approved into the tracking spreadsheet and then forwarded the package to the Senior Assistant Director of PWE Engineering Branch.

8) “Approved by Director of PWE” signature block

This was considered the last stage of the operational review. The Director delegated authority to the Senior Assistant Director in all cases and the Senior Assistant Director signed for the Division. Before signing, this individual performed a high level review of the pay estimate to check for any unusual items.

Once the Estimate for Payment was approved, the package was passed back to the CA who logged the date approved into the tracking spreadsheet and then forwarded the package to Accounting, who completed the payment process.

TCB Pay Estimate Testing

RESULTS AND RECOMMENDATIONS

TCB Pay Estimate Testing

TCB Pay Estimate Testwork

From August 2001 through June 30, 2006, we noted a total of \$30.3 million paid directly to TCB. An additional \$6.5 million was paid to TCB from July 2006 through August 6, 2007. The August payment related to a pay estimate dated July 12, 2007 which covered services through June 29, 2007.

Jefferson Wells (“JW”) noted that contract C52534 included pay estimates 1 – 27 from May 31, 2001 through November 30, 2003. Contract C55495 included pay estimates 1 – 42 from December 31, 2003 through July 12, 2007. Pay estimates subsequent to this date were considered beyond the scope of this review.

We noted that the combined total of these pay estimates were distributed in the following categories:

Category	Dollar Amount
Program Management	\$5,297,069.05
Design Services	\$21,701,993.64
CM & Inspection	\$2,116,966.16
Floodplain Management	\$1,949,555.22
Other Services (Technical Services)	\$5,812,608.98
Total	\$36,878,193.05

Acceptable signatories/indicators of approval

PWE provided a list of the acceptable signatories for each respective signature block of the pay estimates. We reviewed the pay estimates to determine whether the appropriate individuals signed each respective signature block to indicate their review and approval for each pay estimate.

Results of Procedures Performed for Review of TCB Pay Estimates

We reviewed each of the 69 pay estimates covering services provided from the months ended May 31, 2001 through June 29, 2007, noting no significant issues with regard to the individuals signing in each respective signature block. In addition, for each pay estimate, we noted that the cumulative dollar amount spent to date agreed to the support attached to the pay estimate.

RESULTS AND RECOMMENDATIONS

Payment Turnaround by the City

Turnaround time of payment from the date of delivery to the City until the invoices are paid is important not only for TCB but also their related subcontractors. TCB does not pay the SWMP-related subcontractors until first receiving payment from the City. TCB's goal is to pay their SWMP-related subcontractors within 5 days of when they receive payment from the City.

Based on TCB's determination of the date their invoices were sent to the City and the date that payment from the City was received, we noted the following related to average days to pay:

Cumulative Average for Pay Estimates 1 – 42 covering invoice periods from December 31, 2003 through June 29, 2007	39.05 days
Cumulative Average for Pay Estimates 1 – 47 covering invoice periods from December 31, 2003 through November 23, 2007	40.13 days
Pre-SAP implementation for Pay Estimates 1-28 covering invoice periods from December 31, 2003 through April 28, 2006	31.39 days
Conversion period for Pay Estimates 29-30 covering invoice periods from April 29, 2006 through June 30, 2006	75.50 days
Post-SAP implementation for Pay Estimates 31-38 covering invoice periods from July 1, 2006 through February 23, 2007	57.38 days
Post-SAP implementation for Pay Estimates 39-47 covering invoice periods from February 24, 2007 through November 23, 2007	44.11 days

Based on the above, we noted that the turnaround time for payments increased substantially during the conversion period to SAP and for the eight months subsequent to conversion. However, the turnaround time during the most recent nine-month period has decreased to a level much closer to the pre-SAP conversion level. PWE should continue its efforts to minimize total payment turnaround time.

Construction Contract Unit Price Process Overview

RESULTS AND RECOMMENDATIONS

Construction Contract Unit Price Process Overview

Based on discussions with PWE personnel involved in the process, we noted the following with regard to the preparation, review, and approval process of SWMP construction contractor unit price pay estimates:

Project Set-up

After a contract had been executed between the City and a contractor and a pre-construction meeting had been held, the Assistant Project Manager set up the new project in the City's Capital Improvement Project Management System (CIPMS). As part of the setup, each individual pay item was input as a separate line item. Later, as activity occurred on a project, the inspectors tracked the actual item quantities completed directly against the pre-loaded items. In addition, a specific monthly contractor billing cut-off date (i.e. the 10th, 15th, 25th, or last day of each month) was established.

Daily/Weekly Activities

Each day, either a City Inspector or an external CM representative (for instances in which a 3rd party CM is used) generated a Daily Construction Report (DCR) while in the field. The DCR included information regarding conditions on-site, progress achieved by the construction contractor against established pay items (at unit rates), and problems or challenges on site, etc. If, due to a pending change order or construction change directive, a contractor performed work for items not pre-loaded, those were also recorded by the inspector. However, those items did not roll-up into the official monthly pay estimates until there was an executed change order and they had been loaded as additional line items in CIPMS.

The DCR activity was loaded into CIPMS through one of three ways:

- 1) PDA hot sync
- 2) Laptop template uploaded into CIPMS
- 3) Use of a handwritten report which was then entered directly into CIPMS from the jobsite.

Once the Inspector or CM representative prepared the DCR, a Senior Inspector reviewed the report to cross-check it against budgeted and approved pay items before the report was loaded to the City CIPMS as described above.

In many instances, the inspectors printed a hard-copy of the DCR for the contractors to physically sign. While each day's activities were accounted for individually, the uploading of completed quantities into CIPMS may have only taken place a few days per week.

On a Unit Price contract, the DCRs were synchronized with CIPMS within two days of the end of a monthly billing cutoff date. On a Lump Sum contract, the DCRs were synchronized within three days of the end of a monthly billing cutoff date.

RESULTS AND RECOMMENDATIONS

Construction contractors did not participate in the actual preparation of pay estimates against which they were paid. This function was performed totally within PWE once the information on progress earned against established pay items had been gathered and uploaded into CIPMS. A copy of the resulting pay estimates were provided to the construction contractor at the same time PWE forwarded them to PWE Accounts Payable to process them for payment.

Monthly Package Preparation

Based on the month end cutoff date established at the pre-construction meeting, the PWE Assistant Project Manager (APM) generated an initial Pay Estimate and Spreadsheet of Posting showing activity for each individual item within CIPMS. A pay package was generated including the following:

- 1) Estimate Log*
- 2) Estimate and Certificate for Payment Unit Price Work (Pay Estimate Cover sheet)*
- 3) Summary document (Estimate body)*
- 4) Affidavit of Work Performed
- 5) Posting sheet
- 6) DCRs

* included in the Pay Estimate Package

1) Estimate Log

The Estimate Log is a high-level summary of the project including Estimate No., Days Used, Approved Additional Days, Amount to Date, Previous Pmt., Amount Due, Rev/Cons. Schedule (Y/N), Affidavit (Y/N), Utilization Report (Y/N), a Monthly Project Cost Forecast (for Project Managers Only), including Original Contract Amount, Approved Change Orders Amount, Forecasted potential Change Orders Amount, Forecasted Bid Item under/overrun Amount, Total Forecasted Amount, Projected Closeout Amount, Planned Substantial Completion Date, Forecasted Substantial Completion Date, Cash Flow Projection Updated checkbox, and a spot for the Project Manager to initial. The Log also included an area to note specific Project Issues/Concerns for which to pay special attention as well as the cutoff date, date last report received, and current insurance expiration date.

Once the pay estimate package was created by the APM, the estimate log was generated from a template and the date fields were filled out manually by the APM and Project Manager based on the pay estimate cover sheet described below.

RESULTS AND RECOMMENDATIONS

2) Estimate and Certificate for Payment Unit Price Work (cover sheet)

This document was often considered the Pay Estimate and included the Estimate No., Cutoff Date, Estimate Date, Project Name, Contractor Name, Address, Contract No., File No., GFS No., Ordinance No., Contract Date, Start Date, Current Completion Date, Percentage by Time, Percentage In Place, Date Insurance expires, Drug Policy Due Date, Current MWBE %, Original Contract Time, Approved Extension Time (in days), Total Contract Time, Days Used to Date, Days Remaining to Date, Schedule Update received, Original Contract Dollar Amount, Approved Change Orders, and Total Contract Amount. It also included:

A. Earnings To Date (including Work Completed to Date, Material Stored on Site, Material Stored in Place, Balance – Materials Accepted Not in Place, and Advance Allowance).

B. Deductions (including Retainage, Retainage Release, Total Retainage, Liquidated Damages, Quality Control Retest Cost, and Sunday/Holiday Overtime Cost)

C. Amount Due This Period (including Total Earnings to Date, Total Deductions, Total Payments Due, Less Previous Payments, Restoration Adjustment)

These sum to the Total Amount Due Contractor This Date.

A hard-copy of the MWBE utilization form generated by the contractor or construction manager during their input into the City's on-line system was provided from the contractor to the APM five days before the respective monthly cutoff date (established at the pre-construction meeting). Based on this, the APM input the MWBE % into the cover sheet.

Each Estimate and Certificate for Payment Unit Price Work included the following signature blocks (with dates):

- Prepared by
- Checked by
- Reviewed by
- Submitted by
- Approved

3) Summary Document (Estimate Body)

This included a line item for each individual pay item loaded into the system including the Item No, Description, Unit, Plan, Mo. Qty, Mo. \$ Amount, Qty to Date, Unit Price \$, Amt to Date \$, % Comp. The amounts were summaries of the individual DCRs that were synchronized throughout the month.

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4) Affidavit of Work Performed

A hard-copy of this affidavit was provided by the contractor to the APM five days before the respective monthly cutoff date (established at the pre-construction meeting).

This was to certify the request for payment and “represents payments for work performed and/or materials in place and further certifies the above estimate contains no payments for materials on hand and not in place . . .” This was signed by the Project Manager and approved by the Managing Engineer.

5) Posting Sheet

This contained the same information as the Summary Document described above but included information for each submitted DCR throughout the month.

6) DCRs

Described above in the Daily/Weekly Activities section.

Monthly rollover

Each month, the previous month’s Pay Estimate in the system remained in draft status until the Assistant Project Manager approved it. This process occurred before the subsequent month’s pay estimate package could be generated.

Before approval, the APM first had to obtain a hard-copy of the final Approved Pay Estimate package filed with PWE Document Control and checked it to ensure that the Total Amount Due Contractor in the system for the previous month matched the final Approved Pay Estimate (“Payment Rollforward”).

See **Recommendation: Communication of Final Approved Amounts for Monthly Pay Estimates** noted later in this section for a further discussion of the process when the Payment Rollforward did not work.

RESULTS AND RECOMMENDATIONS

Construction Contract Unit Price Pay Estimate Review

In order to prepare a construction project unit price pay estimate, we noted the following five (5) stages of preparation/review.

1) “Prepared by” signature block

After generating the monthly package as described above, the APM performed an initial review to check for duplication of quantities earned and percentage of quantities earned over 100% and discussed any issues noted with the inspector to validate the accuracy of the items included in the Estimate Body. If changes were necessary, the APM made the changes and populated the comments section with the reason for the changes. The APM then signed the Pay Estimate Cover Sheet and forwarded it to the Administrative Supervisor.

Note: Once the DCRs had been synchronized the inspectors could no longer make changes to their daily reports and had to utilize the APM if further changes were needed.

2) “Checked by” signature block

A secondary detailed review of the items above was performed by an Administrative Supervisor or APM. The review consisted of a 100% verification that the DCRs matched the quantities on the Posting Sheet and checking the mathematical extensions of dollar amounts and the retainage calculations. Any issues noted were discussed with the APM and any necessary corrections were made by the APM. The revised package was then provided back to the “Checked by” individual who re-checked the revised items before signing to indicate approval and then forwarded to the Project Manager (PM).

3) “Reviewed by” signature block

The reviewed by function is performed by one of the following individuals that may function as a PM:

- a) Senior Project Manager
- b) Project Manager
- c) Supervising Engineer
- d) Engineer

The PM compared the Posting sheet to the Pay Estimate Summary and evaluated the legitimacy of items based on their day to day knowledge of the project. The PM reviewed for unusual items such as a disparity between item quantities earned versus the actual progress on the job. They also made a determination if there were enough remaining unused quantities on the various pay items to complete the job. Any unusual items were discussed with the Senior Inspector on the job. Any necessary corrections were made at this point. These corrections were handwritten and/or passed back to the APM to change.

RESULTS AND RECOMMENDATIONS

The PM's also reviewed the cover sheet to determine if certificates of insurance were current. If not they contacted the contractors to provide current certificates. Their decision to hold payment (by not signing the Pay Estimate for approval) was based on their level of confidence in the contractor regarding whether or not the contractor would produce an updated certificate of insurance.

In some instances, contractors submitted an "unofficial" monthly pay estimate to the PM. The PM considered this during their review and passed back to the Senior Inspectors in order to be aware of any disparities between the official DCRs and what the contractor believed they had achieved in progress during the current billing period.

If the PM function was performed and evidenced by signature of a non-City of Houston employee, a COH PM assigned to oversee the project indicated concurrence by initialing this line item.

The PMs also completed the Estimate log as described earlier. Once the PM's signed the reviewed by signature block, they forwarded the package to their respective Managing Engineer.

4) "Submitted by" signature block

The submitted by signature block was always signed by the PWE Managing Engineer for the project. Review procedures included the following:

- Performed a high level review of the pay estimate package without reviewing the minute details of routine items
- Reviewed to ensure estimate body totals matched the pay estimate
- Reviewed for progress billed versus progress percentage achieved based on the time schedule.
- Reviewed cash flow projections
- Performed detail spot checks on known issues specific to the project (i.e. delays, contractor claims, problems/challenges encountered)
- Verified changes regarding non-conformance type items made to the pay estimate
- Reviewed to determine if necessary change orders were being processed in a timely manner
- Reviewed to determine if insurance, drug policy, and MWBE information was up to date or needed to be discussed with the contractor
- Reviewed for any other unusual items.

If issues were noted, they requested explanations and or support for items that were of interest. They also reviewed for instances in which a contractor falling behind schedule could lead to a City assessment of liquidated damages. If they noted that a contractor

RESULTS AND RECOMMENDATIONS

was slipping behind schedule, they sent a letter to the contractor to put them on notice that liquidated damages may be assessed. These “Behind Schedule” letters were sent if a project was 15% or more behind time compared to the dollars incurred. It was noted that some projects could have legitimate disparities as most of the costs were up front (digging, etc.).

5) “Approved” signature block

The Senior Assistant Director of the PWE Construction Branch would perform the review and approval procedures with regard to the Approved by signature block with the exception of times when on vacation, at which times he would temporarily designate his signature authority to someone else.

Review procedures included the following:

- Reviewed the Estimate and Certificate for Payment Unit Price Work cover sheet to inspect the Cut Off Date compared to the Estimate Date to determine if the pay estimate was processed in a timely manner
- Compared the actual percentage of work achieved (both percentage by time and percentage in place) with the timeline achieved for reasonableness
- Reviewed change orders, liquidated damages, and work change order directives to ensure they were properly captured
- Reviewed the summary document showing activity by item for anomalies

Once the original copy of the pay estimate was signed, six copies were made and time/date stamped. Four sets, including the original, were sent to the PWE Accounts Payable group, one to the Inspector, one to the Contractor, and one to PWE Document Control.

Conclusion

Review procedures appear to be appropriate for the Construction Contract Unit Price Pay Estimates.

RESULTS AND RECOMMENDATIONS

Process Improvement Recommendation

Recommendation: Communication of Final Approved Amounts for Monthly Pay Estimates

PWE should work with its Accounts Payable group and/or the Information Technology Department to obtain read-only rights for the APMs so they can determine both the date contractor related pay estimates have been paid and the final approved amount. This would allow the APMs to approve the pay estimates in the CIPMS system to ensure that all future changes are made on a go-forward basis only. This will improve the accuracy of CIPMS and minimize confusion and disputes that occasionally occur due to construction managers and inspectors approving outdated DCRs throughout the month.

Basis for Recommendation:

Each month, the previous month's Pay Estimate remained in CIPMS in draft status until the APM approved it. This process occurred before the subsequent month's pay estimate package could be generated.

Before approval, the APM first had to obtain a hard-copy of the final Approved Pay Estimate package filed with PWE Document Control and checked it to ensure that the Total Amount Due Contractor in the system for the previous month matched the Final Approved Pay Estimate. The totals did not match in instances where the PM, Managing Engineer, or Senior Assistant Director changed the Pay Estimate and did not communicate the change back to the APM for processing. (Often, these types of changes could be identified by handwritten changes on the approved pay estimates.)

When this occurred, CIPMS did not reflect these changes, and quantities earned were often overstated in the system. To correct CIPMS to match the prior month's pay estimate, the APM identified the adjustment and input this change on the DCRs submitted in the current month. Until the correction was made, the portion of the DCRs denoting cumulative quantities to date were incorrect. This could create confusion and disputes as the CM's and inspectors had been approving the DCRs throughout the month.

This situation could continue to occur until the APM "locked" the Pay Estimate by approving it within CIPMS. At this point, changes could only be made on a go-forward basis.

Construction Management & Inspection Services Process Overview

RESULTS AND RECOMMENDATIONS

Construction Management and Inspection Services Process Overview

Based on discussions with PWE personnel, we noted the following with regard to the preparation, review, and approval process of SWMP Construction Management pay estimates:

Project Set-up

After a professional services contract had been executed between the City and a CM, the City provided the CM a template to use for the monthly Construction Management & Inspection Service Contract Estimate for Payment (Pay Estimate).

The template included the GFS Number, File No., Project Description, Estimate No., Date from (period included in estimate), Contract No., Date of Contract, Insurance Expiration Date, Date, Consultant's Invoice No., Fund No., MWBE % goal, MWBE % Utilization, Total Contract Days, and No. Days Utilized.

It also included the following Contract Information: Ordinance No., Date Passed, Ordinance Amount, and Additional Appropriations.

The following Invoice Information was also included: Total Invoice to Date, Previously Invoiced, Percent Invoiced to Date, and Total Amount Due this Estimate.

Each Pay Estimate included the following signature blocks (with date):

- 1) Certification by firm
- 2) Received by Contract Administrator
- 3) Reviewed by Project Engineer/Project Manager
- 4) Approval Recommended Chief Engineer Construction Section
- 5) Reviewed by Chief Engineer Design Section (not used)
- 6) Approved by Director of PWE

Each month, the CM firm submitted to the City both their invoice, related support, and the Pay Estimate. Note: CM and Inspection services were not included in the City's CIPMS.

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Construction Management and Inspection Services Pay Estimate Review

The following review was performed on CM and Inspection Service Pay Estimates:

1) “Certification by firm” signature block

Signed by the 3rd party Construction Management firm representative (CM on the project) to indicate that the items represented in the invoice were accurate. The Certification by firm signature block on the Pay Estimate was already signed by the CM when submitted to the City.

2) “Received by Contract Administrator” signature block

As opposed to Pay Estimates for unit price work performed by construction contractors, invoices from Construction Management firms were actually generated directly by those firms and submitted to PWE. Therefore, the contract administrator signed solely to indicate receipt of the invoice from the Construction Management firm. The package was then forwarded to the PM.

3) “Reviewed by Project Engineer/Project Manager (PM) signature block

The PM performed the following:

- Reviewed for cost expended versus percentage days utilized on the job
- Confirmed that the invoice and related pay estimate were in accordance with the terms and conditions of the contract between the CM and the City
- Reviewed time sheets attached to the pay estimate to ensure accuracy with regard to the invoice and pay estimate. Checked that rates charged were in accordance with contractually established pay rates
- Reviewed to ensure any other necessary support (i.e. reimbursable items) were attached to the pay estimate and were accurate with regard to the invoice and pay estimate

If appropriate supporting documentation was not included, the PM sent the Pay Estimate back to the CM for explanation and/or correction.

The PM’s other responsibilities regarding CM type contracts included serving as a liaison between the CM and other City departments when needed (i.e. Utility issues) and attending the CM’s monthly progress meeting as an observer.

4) “Approval Recommended Chief Engineer Construction Section” signature block

A Managing Engineer or Chief Engineer performed a quality assurance check of the Pay Estimate compared to the invoice for the same type of items the PM reviewed above.

RESULTS AND RECOMMENDATIONS

5) “Reviewed Chief Engineer Design Section” signature block

This review was not applicable for this invoice type.

6) “Approved Director of PWE” signature block

Performed a high level review of the Pay Estimate to check for any unusual items.

Conclusion

Review procedures appeared to be appropriate for the CM and Inspection Services Pay Estimates.

Construction Contract and Construction Management Pay Estimate Testing

RESULTS AND RECOMMENDATIONS

Construction Contract and Construction Management Pay Estimate Testing

The following section discusses the procedures performed on each of the four projects selected for testing of proper management review and approval controls over the respective pay estimates.

Project M-0254-01-03 Timbergrove

We noted the following roles with regard to this project:

Service Provider Type	Service Provider	Contract No.
Construction Manager	Internal – City of Houston PWE	n/a
Contractor – Unit Price	D.L. Elliot Enterprises	C56762
Testing & Inspection Services	HTS, Inc.	C53721

We noted that per the PJ529M report, actual expenditures inception through June 30, 2006 for Project M-254 totaled \$5.579 million with \$5.267 million related to Phase 3 Construction.

Contractor Unit Price Contract

For the Unit Price contract related to D.L. Elliot (C56762), JW obtained Pay Estimate packages 1–13, processed within AFMS, the City’s accounting system through June 30, 2006. We noted a total of \$4,975,606 in expenditures, inclusive of retainage through June 30, 2006.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 14-23, processed within SAP, noting an additional \$2,755,810 incurred for a total amount incurred of \$7,731,417 through June 30, 2007, inclusive of retainage.

Testing & Inspection Contract

For the Testing & Inspection contract related to HTS, Inc. (C53721), we obtained all related Contract Payment cover sheets from July 2005 through May 2007. We noted that Testing & Inspection Pay Estimates are not numbered sequentially as the testing contractors may perform procedures for multiple City contracts, not necessarily confined to SWMP projects. While the totals of these contracts are included within the totals used to tie the PJ529 report (which covers expenditures through June 30, 2006), an equivalent PJ529 report does not exist within SAP. Therefore, there are no check totals to verify that the total population of these has been captured within SAP.

Amounts expended through June 30, 2006 and recorded in AFMS total \$78,104. Total amounts tested in both AFMS and SAP through June 30, 2007 totaled \$200,275.

RESULTS AND RECOMMENDATIONS

We noted that the Testing & Inspection expenditures total a very small percentage of the overall expenses compared to the Unit Price pay estimates (which can be tracked sequentially within SAP). In this instance, total Testing & Inspection pay estimates tested were \$200,275 compared to \$7.7 million for the Unit Price contracts.

We noted that each testing & inspection pay estimate package contained the following items indicating review and approval for each respective signature:

- Submitted – Geo Environmental Services Branch
- Verified – Construction Branch
- Recommended - Construction Branch
- Approved - Geo Environmental Services Branch

Acceptable signature/indicators of approval

We obtained from PWE a list of the acceptable individuals to sign each respective signature block of the pay estimates. We then reviewed the signature blocks on each pay estimate to determine whether the appropriate individuals signed each respective signature block to indicate their review and approval.

Amounts tested through June 30, 2006 tied to PJ529M

D.L. Elliot Unit Price	\$4,975,606
HTS Testing & Inspection	\$78,105
Accruals at June 30, 2006	\$213,507
Total tied to PJ529 at June 30, 2006	\$5,267,218

As noted above, equivalent PJ529 reports do not currently exist within SAP.

Additional amounts tested from July 1, 2006 through June 30, 2007

D.L. Elliot Unit Price	\$2,755,810
HTS Testing & Inspection	\$122,171
Accruals at June 30, 2007	-
Total Amount in SAP at June 30, 2007	\$2,877,981

Results of Procedures Performed for Project M-0254-01-03 Timbergrove

Based on procedures performed, the appropriate individuals signed each respective signature block to indicate their review and approval for the pay estimate.

RESULTS AND RECOMMENDATIONS

Project M-0255-01-03 Braes Blvd.

We noted the following roles with regard to this project:

Service Provider Type	Service Provider	Contract No.
Construction Manager	Carter & Burgess	C56947
Contractor – Unit Price	Conrad Construction Co	C56991
Testing & Inspection Services	Geotest Engineering	C53712

We noted that per the PJ529M report, actual expenditures inception to date for Project M-255 totaled \$4.038 million with \$3.894 million related to Construction.

Construction Manager Professional Services Contract

For the Construction Manager Professional Services Contract related to Carter & Burgess (C56947), we obtained Pay Estimate packages 1-10, processed within AFMS. We noted a total of \$203,208 in expenditures, plus an accrual of \$37,000, through June 30, 2006.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 11-23, processed within SAP, noting an additional \$346,305 incurred for a total amount incurred of \$549,513 through June 30, 2007.

Contractor Unit Price Contract

For the Unit Price contract related to Conrad Construction (C56991), we obtained Pay Estimate packages 1-9, processed within AFMS. We noted a total of \$3,598,472 in expenditures, inclusive of retainage through June 30, 2006.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 10-21, processed within SAP, noting an additional \$4,777,702 incurred for a total amount incurred of \$8,376,174 through June 30, 2007, inclusive of retainage.

Testing & Inspection Contract

For the Testing & Inspection contract related to Geotest Engineering (C53712), we obtained all related Contract Payment cover sheets from January 2006 through June 2007. We noted that Testing & Inspection Pay Estimates are not numbered sequentially as the testing contractors may perform procedures for multiple City contracts, not necessarily confined to SWMP projects. While the totals of these contracts are included within the totals used to tie the PJ529M report (which covers expenditures through June 30, 2006), an equivalent PJ529M report does not exist within SAP. Therefore, there are no check totals to verify that the total population of these has been captured within SAP.

Amounts expended through June 30, 2006 and recorded in AFMS total \$55,605. Total amounts tested in both AFMS and SAP through June 30, 2007 totaled \$236,746.

RESULTS AND RECOMMENDATIONS

We noted that the Testing & Inspection expenditures totaled a very small percentage of the overall expenses compared to the Unit Price pay estimates (which can be tracked sequentially within SAP). In this instance, total Testing & Inspection pay estimates tested were \$236,746 compared to \$8.3 million for the Unit Price contracts.

We noted that each testing & inspection pay estimate package contained the following items indicating review and approval for each respective signature:

- Submitted – Geo Environmental Services Branch
- Verified – Construction Branch
- Recommended - Construction Branch
- Approved - Geo Environmental Services Branch

Acceptable signature/indicators of approval

We obtained from PWE a list of the acceptable individuals to sign each respective signature block of the pay estimates and reviewed to determine whether the appropriate individuals signed each respective signature block to indicate their review and approval for the pay estimate.

Amounts tested through June 30, 2006 tied to PJ529M

Carter & Burgess Construction Mgr	\$240,208
Conrad Construction Unit Price	\$3,598,472
Geotest Testing & Inspection	\$55,605
Total tied to PJ529 at June 30, 2006	\$3,894,285

As noted above, equivalent PJ529 reports do not currently exist within SAP.

Additional amounts tested from July 1, 2006 through June 30, 2007

Carter & Burgess Construction Mgr	\$346,305
Conrad Construction Unit Price	\$4,777,702
Geotest Testing & Inspection	\$181,141
Total Amount in SAP at June 30, 2007	\$5,305,148

Results of Procedures Performed for Project M-0255-01-03 Braes Blvd.

Based on procedures performed, the appropriate individuals signed each respective signature block to indicate their review and approval for the pay estimate. However, the following control issues were noted as discussed below:

- Of the 21 unit price pay estimates tested, we noted 5 instances in which the same individual signed both the Reviewed by and Submitted by lines.

RESULTS AND RECOMMENDATIONS

- Of the 23 construction manager professional services pay estimates tested, we noted 1 instance in which the same individual signed both the Reviewed by and Approval Recommend lines.

While these individuals are appropriate to sign in either of these lines, the established internal control is compromised by not having separate individuals review and indicate approval on the pay estimates.

RESULTS AND RECOMMENDATIONS

Project M-0771-02-03 Kirby Drive

We noted the following roles with regard to this project:

Service Provider Type	Service Provider	Contract No.
Construction Manager	ATSER	C61619
Contractor - Unit Price	Texas Sterling Segment 1	C56051
Testing & Inspection Services	HBC/Terracon Segment 1	C53717
Contractor - Unit Price	Total Contracting Segment 2	C60067
Testing & Inspection Services	Prof. Service Industries Segment 2	C53731

We noted that per the PJ529M report, actual expenditures inception to date for Project M-0771 totaled \$15.193 million with \$14.693 million related to Construction.

Construction Manager Professional Services Contract

For the Construction Manager Professional Services Contract related to ATSER (C61619), we obtained Pay Estimate packages 1-4, processed within AFMS. We noted a total of \$89,402 in expenditures, plus an accrual of \$31,000, through June 30, 2006.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 5-22, processed within SAP, noting an additional \$581,993 incurred for a total amount incurred of \$671,395 through June 30, 2007.

Unit Price Contracts

Texas Sterling (Segment 1)

For the Unit Price contract related to Texas Sterling Segment 1 (C56051), we obtained Pay Estimate packages 1-22, processed within AFMS. We noted a total of \$12,717,450 in expenditures in the PJ529, inclusive of retainage through June 30, 2006. We also noted \$397,352 paid out of the Water & Sewer Consolidated Construction Fund (included in the PJ29S report and not the PJ529 report), \$144,934 paid out of Fund #755, not part of the PJ529M rollup, and an accrual of \$259,805 later reversed in SAP for a total of \$12,999,831 incurred through Pay Estimate 22.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 23-25, processed within SAP, noting an additional \$230,951 incurred for a total amount incurred of \$13,230,782 through June 30, 2007, inclusive of retainage.

RESULTS AND RECOMMENDATIONS

Total Contracting (Segment 2)

For the Unit Price contract related to Total Contracting Segment 2 (C60067), we obtained Pay Estimate packages 1–3, processed within AFMS. We noted a total of \$1,141,844 in expenditures in the PJ529, inclusive of retainage and accruals of \$104,500 through June 30, 2006. The accrual was later reversed in SAP.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 4-15, processed within SAP, noting an additional \$6,150,201 incurred for a total amount incurred of \$7,187,545 through June 30, 2007, inclusive of retainage.

Testing & Inspection Contracts

HBC/Terracon

For the Testing & Inspection contract related to HBC Engineering/Terracon Segment 1 (C53717), we obtained all related Contract Payment cover sheets from October 2004 through March 2007. We noted that Testing & Inspection Pay Estimates are not numbered sequentially as the testing contractors may perform procedures for multiple City contracts, not necessarily confined to SWMP projects. While the totals of these contracts are included within the totals used to tie the PJ529M report (which covers expenditures through June 30, 2006), an equivalent PJ529M report does not exist within SAP. Therefore, there are no check totals to verify that the total population of these has been captured within SAP.

Amounts expended through June 30, 2006 and recorded in AFMS total \$160,601. Total amounts tested in both AFMS and SAP through June 30, 2007 totaled \$162,739.

We noted that each testing & inspection pay estimate package contained the following items indicating review and approval for each respective signature:

- Submitted – Geo Environmental Services Branch
- Verified – Construction Branch
- Recommended - Construction Branch
- Approved - Geo Environmental Services Branch

Professional Service Industries (PSI) Segment 2

For the Testing & Inspection contract related to PSI Segment 2 (C53731), we obtained all related Contract Payment cover sheets from August 2006 through June 2007. JW noted that Testing & Inspection Pay Estimates are not numbered sequentially as the testing contractors may perform procedures for multiple City contracts, not necessarily confined to SWMP projects. None of these were processed within AFMS and, therefore, are appropriately not included in the reconciliation to the PJ529 report.

Amounts expended through June 30, 2006 and recorded in AFMS total \$0. Total amounts tested in both AFMS and SAP through June 30, 2007 totaled \$165,640.

RESULTS AND RECOMMENDATIONS

Acceptable signatories/indicators of approval

We obtained from PWE a list of the acceptable signatories for each respective signature block of the pay estimates and reviewed to determine whether the appropriate individuals signed each respective signature block to indicate their review and approval for the pay estimate.

Amounts tested through June 30, 2006 tied to PJ529M

ATSER Construction Mgr	\$120,402
TX Sterling Segment 1 Unit Price	\$12,717,350
Total Contracting Segment 2 Unit Price	\$1,141,844
HBC/Terracon Testing & Inspection	\$160,601
TCB Pay Estimate 20 C55495	\$520,190
Other accrual – reversed within SAP	\$32,574
Total tied to PJ529 at June 30, 2006	\$14,692,961

As noted above, equivalent PJ529M reports do not currently exist within SAP.

Additional amounts tested from July 1, 2006 through June 30, 2007

ATSER Construction Mgr	\$581,994
TX Sterling Segment 1 Unit Price	\$230,951
Total Contracting Segment 2 Unit Price	\$6,150,201
HBC/Terracon Testing & Inspection	\$13,380
Professional Service Industries	\$165,641
TCB Pay Estimate 20 C55495	-
Other accrual – reversed within SAP	-
Total Amount in SAP at June 30, 2007	\$7,142,167

Results of Procedures Performed for Project M-0771-02-03 Kirby Drive

Based on procedures performed, the appropriate individuals signed each respective signature block to indicate their review and approval for the pay estimate.

RESULTS AND RECOMMENDATIONS

Project M-0260-02-03 Hermann Drive

We noted the following roles with regard to this project:

Service Provider Type	Service Provider	Contract No.
Construction Manager	SES Horizon Consulting Engineers	C57103
Contractor - Unit Price	Oscar Renda – Segment 4	C55872
Contractor - Unit Price	Texas Sterling – Segment 1	C56463
Contractor - Unit Price	Texas Sterling – Segment 2	C57084
Testing & Inspection Services	Paradigm Consultants – Seg. 4	C53729
Testing & Inspection Services	QC Laboratories – Segment 1	C53733
Testing & Inspection Services	Associated Testing Labs– Seg. 2	C53843

We noted that per the PJ529M report, actual expenditures inception to date for Project M-0260 totaled \$35.126 million with \$22.610 million related to Construction.

Construction Manager Professional Services Contract

For the Construction Manager Professional Services Contract related to SES Horizon Consulting (C57103), we obtained Pay Estimate packages 1-4, processed within AFMS. We noted a total of \$227,580 in expenditures through June 30, 2006.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 5-10, processed within SAP, noting an additional \$253,898 incurred for a total amount incurred of \$481,478 through June 30, 2007.

Unit Price Contracts

Oscar Renda (Segment 4)

For the Unit Price contract related to Oscar Renda Segment 4 (C55872), we obtained Pay Estimate packages 1-20, processed within AFMS. We noted a total of \$6,086,150 in expenditures in the PJ529, inclusive of retainage through June 30, 2006 and an accrual of \$1,145,400 which later reversed in SAP for a total of \$7,231,550 incurred through Pay Estimate 20.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 21-28, processed within SAP, noting an additional \$721,933 incurred for a total amount incurred of \$6,808,083 through June 30, 2007, inclusive of retainage and liquidated damages.

Texas Sterling (Segment 1)

For the Unit Price contract related to Texas Sterling Segment 1 (C56463), we obtained Pay Estimate packages 1-14, processed within AFMS. We noted a total of \$7,298,287 in expenditures in the PJ529, inclusive of retainage. We also noted \$683,903 paid out of the

RESULTS AND RECOMMENDATIONS

Water & Sewer Consolidated Construction Fund (included in the PJ29S report and not the PJ529 report), and an accrual of \$291,951 later reversed in SAP for a total of \$6,906,335 incurred through Pay Estimate 14.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 15-17, processed within SAP, noting an additional \$35,079 incurred for a total amount incurred of \$7,333,366 through June 30, 2007, inclusive of retainage.

Texas Sterling (Segment 2)

For the Unit Price contract related to Texas Sterling Segment 2 (C57084), we obtained Pay Estimate packages 1-7, processed within AFMS. We noted a total of \$7,079,625 in expenditures in the PJ529, inclusive of retainage and an accrual of \$855,000 later reversed in SAP for a total of \$7,934,625 incurred through Pay Estimate 7.

As our scope included expenditures incurred through June 30, 2007, we also obtained Pay Estimate packages 8-13, processed within SAP, noting an additional \$1,618,023 incurred for a total amount incurred of \$8,697,648 through June 30, 2007, inclusive of retainage.

Testing & Inspection Contracts

Paradigm Consultants (Segment 4)

For the Testing & Inspection contract related to Paradigm Consultants Segment 4 (C53729), we obtained all related Contract Payment cover sheets from August 2004 through June 2007. We noted that Testing & Inspection Pay Estimates are not numbered sequentially as the testing contractors may perform procedures for multiple City contracts, not necessarily confined to SWMP projects. While the totals of these contracts are included within the totals used to tie the PJ529M report (which covers expenditures through June 30, 2006), an equivalent PJ529M report does not exist within SAP. Therefore, there are no check totals to verify that the total population of these has been captured within SAP.

Amounts expended through June 30, 2006 and recorded in AFMS total \$32,930 inclusive of an accrual of \$6,098 later reversed in SAP. Total amounts tested in both AFMS and SAP through June 30, 2007 totaled \$95,365.

We noted that each testing & inspection pay estimate package contained the following items indicating review and approval for each respective signature:

- Submitted – Geo Environmental Services Branch
- Verified – Construction Branch
- Recommended - Construction Branch
- Approved - Geo Environmental Services Branch

RESULTS AND RECOMMENDATIONS

QC Laboratories (Segment 1)

For the Testing & Inspection contract related to QC Laboratories Segment 1 (C53733), we obtained all related Contract Payment cover sheets from July 2005 through May 2006. We noted that Testing & Inspection Pay Estimates are not numbered sequentially as the testing contractors may perform procedures for multiple City contracts, not necessarily confined to SWMP projects. While the totals of these contracts are included within the totals used to tie the PJ529M report (which covers expenditures through June 30, 2006), an equivalent PJ529M report does not exist within SAP. Therefore, there are no check totals to verify that the total population of these has been captured within SAP.

Amounts expended through June 30, 2006 and recorded in AFMS total \$118,877. No further amounts were noted under SAP.

Associated Testing Laboratories (Segment 2)

For the Testing & Inspection contract related to Associated Testing Laboratories Segment 2 (C53843), we obtained all related Contract Payment cover sheets from January 2006 through October 2006. We noted that Testing & Inspection Pay Estimates are not numbered sequentially as the testing contractors may perform procedures for multiple City contracts, not necessarily confined to SWMP projects. While the totals of these contracts are included within the totals used to tie the PJ529M report (which covers expenditures through June 30, 2006), an equivalent PJ529M report does not exist within SAP. Therefore, there are no check totals to verify that the total population of these has been captured within SAP.

Amounts expended through June 30, 2006 and recorded in AFMS total \$158,000 inclusive of an accrual of \$46,347 later reversed in SAP. Total amounts tested in both AFMS and SAP through June 30, 2007 totaled \$175,615.

Acceptable signature/indicators of approval

We obtained from PWE a list of the acceptable individuals to sign each respective signature block of the pay estimates and reviewed to determine whether the appropriate individuals signed each respective signature block to indicate their review and approval for the pay estimate.

Amounts tested through June 30, 2006 tied to PJ529M

SES Horizon Construction Mgr	\$227,580
Oscar Renda Segment 4 Unit Price	\$7,231,550
TX Sterling Segment 1 Unit Price	\$6,906,336
TX Sterling Segment 2 Unit Price	\$7,934,625
Paradigm Segment 4 Testing & Inspection	\$32,930
QC Labs Segment 1 Testing & Inspection	\$118,876
Associated Segment 2 Testing & Inspection	\$158,000
Total tied to PJ529 at June 30, 2006	\$22,609,897

RESULTS AND RECOMMENDATIONS

As noted above, equivalent PJ529M reports do not currently exist within SAP.

Additional amounts tested from July 1, 2006 through June 30, 2007

SES Horizon Construction Mgr	\$253,898
Oscar Renda Segment 4 Unit Price	\$721,933
TX Sterling Segment 1 Unit Price	\$35,078
TX Sterling Segment 2 Unit Price	\$1,618,023
Paradigm Segment 4 Testing & Inspection	\$68,533
QC Labs Segment 1 Testing & Inspection	-
Associated Segment 2 Testing & Inspection	\$63,961
Total Amount in SAP at June 30, 2007	\$2,761,426

Results of Procedures Performed for Project M-0260-02-03 Hermann Drive

Based on procedures performed, the appropriate individuals signed each respective signature block to indicate their review and approval for the pay estimate. However, the following control issues were noted as discussed below:

- Of the 13 unit price pay estimates tested for Project M-0260-02-03 Hermann Drive, we noted 6 instances in which the same individual signed both the Reviewed by and Submitted by lines.
- Of the 10 construction manager professional services pay estimates tested for Project M-0260-02-03 Hermann Drive, we noted 2 instances in which the same individual signed both the Reviewed by and Approval Recommended lines.

While these individuals are appropriate to sign in either of these lines, the established internal control is compromised by not having separate individuals review and indicate approval on the pay estimates.

RESULTS AND RECOMMENDATIONS

Process Improvement Recommendations

Our testing of proper management review and approval controls over the four projects selected revealed the following process improvement opportunities:

Recommendation: Inclusion of Certification of Payment to Subcontractors & Suppliers

To ensure the City is protected in instances of a subcontractor claim that they were not properly compensated by a prime contractor operating as an agent of the City, we recommend that PWE continue their effort to locate Certifications of Payment to Subcontractors & Suppliers not included with the respective interim pay estimate packages. Going forward, PWE should ensure that these are received on a monthly basis before the pay estimates are approved.

Basis for Recommendation:

For all projects reviewed, the Certifications of Payment to Subcontractors & Suppliers were only sporadically included in Pay Estimate packages. Certifications not found in the pay estimate packages had been separated from the packages and placed in separate contract files. As a result, no evidence of the review of the existence of these certifications could be found as part of the interim pay estimate approval process. The certification provides support for the City in an instance in which a Subcontractor claims that they were not properly compensated by a prime contractor operating as an agent of the City.

General Conditions of contractor contracts include the following clause:

“Contractor shall prepare and submit to City Engineer a Certificate of Payment to Subcontractors and Suppliers form to be attached to each monthly Estimate for Payment or Application for Payment.”

Upon identification of this issue as a result of our testing, the PWE Construction Branch Senior Assistant Director communicated that these certifications are supposed to be included in the Pay Estimate packages. In addition, they began the process of locating the certifications for the projects tested that should have been included with the pay estimate packages.

RESULTS AND RECOMMENDATIONS

Recommendation: Strengthen internal control requiring separate individuals to sign in different signature blocks on the Pay Estimate

We recommend that the internal control requiring separate individuals to review and indicate approval through signature in the appropriate signature block be consistently followed in order to fully realize the benefit of a check and balance control system.

Basis for Recommendation:

- Of the 21 construction contractor unit price pay estimates tested for Project M-0255-01-03 Braes. Blvd., we noted 5 instances in which the same individual signed both the Reviewed by and Submitted by lines.
- Of the 23 construction manager professional services pay estimates tested for Project M-0255-01-03 Braes. Blvd, we noted 1 instance in which the same individual signed both the Reviewed by and Approval Recommend lines.
- Of the 13 construction contractor unit price pay estimates tested for Project M-0260-02-03 Hermann Drive, we noted 6 instances in which the same individual signed both the Reviewed by and Submitted by lines.
- Of the 10 construction manager professional services pay estimates tested for Project M-0260-02-03 Hermann Drive, we noted 2 instances in which the same individual signed both the Reviewed by and Approval Recommended lines.

In all instances, the individuals who signed multiple signature blocks on the respective pay estimates were appropriately authorized to sign each of the individual signature blocks. However, the established internal control is compromised by not having separate individuals review and indicate approval on the pay estimates.

Contract and Change Order Approval / Authorization Process

RESULTS AND RECOMMENDATIONS

Contract and Change Order Approval/Authorization Process

We noted the following with regard to the process of preparing and approving construction contracts, amendments, and change orders for proper approvals / authorizations.

Professional Services Contracts

Based on discussion with PWE personnel involved in the process, changes to Professional Services Contracts can be made in the following ways:

- 1) Contract Amendment - used for changes in scope of project or terms of contract (including rate adjustments)
- 2) Supplemental Allocation - used to increase the dollars available for a project without changing the scope

Formal RCAs are required for either of the above situations.

We did note that the Senior Assistant Director does have the authority to reallocate dollars among individual line items within a contract without a formal RCA as long as the overall dollars allocated to the project do not change.

Results of Procedures Performed

TCB Contract

Per review of the professional service contract C55495 with TCB we noted the following contractual changes requiring RCAs during the period of our review:

Description	Counterparty	Ordinance Number	Date Countersigned	Appropriated Amount
1 st Amendment to an Agreement for Professional Engineering Services for Program Management of SWMP	J.F. Thompson, Inc.	05-0442	05/12/2005	Additional \$5,372,048.00 and changes to raw salary rates
Additional Appropriation to Professional Engineering Services Contract between the City and TCB for Services Associated with the SWMP	TCB, Inc.	06-0498	05/23/2006	Additional \$3,515,000.00
2 nd Amendment to an Agreement for Professional Engineering Services for Program Management of SWMP	Based on acquisition of Thompson on 09/22/05 changed to TCB, Inc.	07-0026	01/11/2007	No Additional Appropriation but changes to raw salary rates

RESULTS AND RECOMMENDATIONS

We reviewed the various contract changes and the associated RCAs to determine if both contract amendments and supplemental appropriations had been prepared and processed in accordance with the procedures described during our interviews with PWE personnel. In all instances the RCA documentation appeared to be complete and in proper form. The RCAs were appropriately supported with details of the requested change(s) in contract terms, conditions and/or additional funds required, and prepared and authorized by appropriate members of PWE management. No exceptions were noted.

Professional Service Contracts for Projects Selected

Our review of the professional service contracts for the four projects selected for compliance testing revealed the following:

Project	Description	Construction Manager Selected	Revisions to Contract requiring RCAs
1) M-0254	Timbergrove	City of Houston	not applicable
2) M-0255	Braes Blvd.	Carter & Burgess	none noted
3) M-0771	Kirby Drive Segment Two	ATSER	none noted
4) M-0260	Texas Medical Center – Hermann Drive Segment Two	SES Horizon Consulting Engineers	none noted

Based on our review of the professional service contracts for the noted projects we did not note any revisions to their contracts as of June 2007 that required RCAs.

Construction Contractor Change Orders

The PWE Construction Management Process Manual, Section 3.8 notes the following with regard to the change order process:

“Change Orders are used to affect Modifications to the Contract. Prior to final payment, previously approved Work Change Directives can be combined into a summary Change Order to reconcile project cost accounting. When signed and dated by Contractor and City Engineer, document becomes an approved Change Order.”

Change orders are used for Modifications to the Contract including but not limited to the following:

- Additions or reductions (including deletions) of existing bid item quantities.
- Increases or decreases in construction Contract Time.
- Change in methods, material, etc. not covered by existing bid item quantities.
- New work not covered by existing bid item quantities.
- Price or schedule consideration for conditions not indicated by the Contract.

RESULTS AND RECOMMENDATIONS

Either the PM or the Design Consultant prepares the change order. Each change order package includes the following:

1) Change Order Document

The actual Change Order Document including identifying information, a description of changes, and justification for each change. The Change Order contains signature blocks for the following:

- “Acceptance by Contractor”
- “Acceptance by City” signed by the Project Manager, Chief Engineer, Assistant Director, Deputy Director, City Engineer, and the Mayor.

2) Executive Summary

An Executive Summary which contains the following:

- Contract Price Summary including the change in both dollar amounts and percent, Original Contract Price, Previous Change Orders, This Change Order, and Contract Price
- Contract Time Summary including the Original Contract Time, Previous Change Orders, This Change Order, and Contract Time in duration and by completion date.
- Total value of increases outside of general scope of work

3) Fact Sheet

A Fact Sheet to be signed by the City-Construction PM which contains the following questions:

- When was the need for proposal first discovered and by whom?
- Why is the work described on the proposal necessary?
- How was the pricing confirmed and/or negotiated?
- Why are the additional calendar days required to be added to the contract?
- Why is the work described on the proposal not covered by the original bid items?
- Is the proposal work necessary due to: differing site conditions, possible omissions, and/or inaccurate designs or other specific reason(s)?
- Should this be reviewed by Design Section to be referred to Design Consultant for potential errors/omissions?
- How will labor charges on the proposal be monitored and isolated from normal charges which are incidental to pay item work?

RESULTS AND RECOMMENDATIONS

4) Proposal

A Proposal describing the change which contains signature blocks for the following:

- “Submitted by” Contractor Representative
- “Reviewed by” City-Construction PM
- “Recommend Approval by” City-Construction Chief Engineer
- “Approved by” City-Assistant Director
-

If a change order is anticipated to exceed 105% of the original contract, the change requires City Council approval.

Procedures Performed

Per our review of the construction contractor change orders for the four projects selected for compliance testing, as noted per the most recent pay estimates selected for testwork, we noted the following change orders:

Project	Number	Contractor	Contract Number	Change Order #	Date	Extra Days	Amount
Timbergrove	M-0254	D.L.Elliot	C56762	1	11/4/2005	0	\$ 3,118.83
Timbergrove	M-0254	D.L.Elliot	C56762	2	2/15/2006	30	\$255,410.00
Timbergrove	M-0254	D.L.Elliot	C56762	3	9/26/2006	56	\$ -
Braes Blvd	M-0255	Conrad Construction	C56991	1	8/15/2006	4	\$ 40,863.90
Braes Blvd	M-0255	Conrad Construction	C56991	2	1/4/2007	112	\$ 6,060.55
Kirby Drive Segment 2	M-0771 K2	Total Contracting	C60067	1	9/7/2006	0	\$ 53,869.00
Texas Medical Center Segment 2	M-0260 H2	Texas Sterling	C57084	1	8/28/2006	0	\$186,766.31

For each of the above change orders, we obtained the change order packages and reviewed to determine whether the appropriate individuals signed each respective signature block to indicate their review and approval.

Results of Procedures Performed

While repeated requests were made, PWE Construction Section did not provide the Kirby Drive M-0771 K2 Total Contracting Change Order Fact Sheet and Proposal information. These documents are used to facilitate the execution of the formal change order. We did, however, receive the executed Change Order Document and related executive summary for that requested change order. As such, we considered the missing documentation a minor exception. For all other change orders requested, we received complete change order packages and noted that the appropriate individuals signed each respective signature block to indicate their review and approval.

Insurance Coverage

RESULTS AND RECOMMENDATIONS

Insurance Coverage

The following section discusses the procedures performed to verify that evidence of insurance coverage had been obtained by the PWE Engineering & Construction Division for SWMP projects and that such coverage was being maintained.

Sample Selection

The following provides a cross-section of contractors representing the various roles held by non-City of Houston firms in the SWMP:

#	Name	Project Reference	Project Name	Role
1	D.L. Elliot Enterprises	M-0254	Timbergrove	Contractor
2	Carter & Burgess	M-0255	Braes Blvd	Construction Manager
3	Conrad Construction	M-0255	Braes Blvd	Contractor
4	TCB *	M-0771 K1	Kirby	Construction Manager
5	Texas Sterling Construction	M-0771 K1	Kirby	Contractor
6	SES Horizon Consulting	M-0260 H2	TMC Hermann Dr	Construction Manager
7	Texas Sterling Construction	M-0260 H2	TMC Hermann Dr	Contractor

* formerly J.F. Thompson (July 1, 2003 – July 1, 2006), TCB (July 1, 2006 forward)

Note: For Project M-0254, Construction Management was provided internally by the City of Houston.

Procedures Performed

For each contract selected for testwork, JW reviewed their contracts and noted the following types of insurance:

Type of Insurance
Workers' Compensation
Employer's Liability
Owner's and Contractor's Protective Liability
Commercial General Liability Bodily and Personal Injury; Products and Completed Operations Coverage
Excess Liability
Automobile Liability
Professional Liability
Installation Floater in some instances

RESULTS AND RECOMMENDATIONS

For each type of insurance noted above, we noted the following attributes:

- Limit of Liability and Coverage
- Period Contractor Insurance In Place for each of the required types of coverage
- Certificate of Insurance Issue Date
- Amount of Actual Coverage Required per Contract
- Insurer
- Insurer Rating

For each contract selected above, we reviewed the Certificates of Insurance (Certificates) associated with each contract to determine if the Certificates provided evidence that insurance coverage had been obtained and maintained by the Engineering & Construction Division in accordance with each respective contract.

Process Improvement Recommendation

Recommendation: Evidence of Insurance Coverage

Evidence of insurance coverage for all contractually required types of insurance was inconsistently maintained for SWMP projects by the Engineering & Construction Division. Lack of contractually required insurance coverage by a City contractor could expose the City to risk of loss in the event of an accident or incident on a jobsite.

We recommend that the Engineering & Construction Division develop a database to track all contracts requiring Certificates of Insurance from contractors including types of required coverage, amounts of required coverage, insurer, insurer rating, period covered by most recent certificate date, and date of next required certificate. An individual, perhaps in Document Control, should be assigned to monitor the status of contractor Certificates of Insurance and coordinate with either the PM or contractors to ensure that current Certificates of Insurance are on file within PWE at all times that project work is underway.

Basis for Recommendation:

Based on the procedures performed, the Engineering & Construction Division was able to provide appropriate evidence that insurance coverage had been obtained and maintained in accordance with their respective contracts with the following exceptions:

- For Project M-0254 Timbergrove, the Certificate provided for the period from March 8, 2007 to March 8, 2008 for the contractor, D.L. Elliot Enterprises, was dated September 24, 2007. Based on this, it appeared that the Engineering & Construction Division did not have this Certificate on file and obtained it after requested for audit procedures. In addition, the Certificate covering Owner's and Contractor's Protective Liability was not provided for the period from January 22, 2006 to March 8, 2006. Also, the Certificate covering Owner's and Contractor's Protective Liability from March 8, 2007 to May 8, 2007 was dated October 8, 2007. Based on this, it appeared

RESULTS AND RECOMMENDATIONS

that the Engineering & Construction Division did not have this certificate on file and obtained it after requested for audit procedures.

- For Project M-0255 Braes Blvd., Certificates were not provided for the period(s) from May 17, 2005 to July 1, 2006 for the Construction Manager, Carter & Burgess with the exception of Professional Liability insurance. However, a Certificate for Professional Liability was not provided for the period from July 1, 2007 to July 1, 2008.
- For Project M-0255 Braes Blvd., the Certificate covering Owner's and Contractor's Protective Liability from March 9, 2005 to October 31, 2007 was dated November 2, 2007. Based on this, it appeared that the Engineering & Construction Division did not have this Certificate on file and obtained it after requested for audit procedures.
- For Project M-0771 K1 Kirby Segment One, the Certificate provided for the period from April 1, 2007 to April 1, 2008 for the CM, TCB, was dated September 19, 2007. In addition, the Certificate covering Commercial General Liability, Automobile Liability Insurance, and Professional Liability insurance provided for the period from April 1, 2006 to April 1, 2007 was dated September 19, 2007. Based on this, it appeared that the Engineering & Construction Division did not have these Certificates on file and obtained them after requested for our audit procedures.
- For Project M-0771 K1 Kirby Segment One, the Certificate provided for the period from March 1, 2007 to March 1, 2008 for the contractor, Texas Sterling Construction, was dated October 11, 2007. Based on this, it appeared that the Engineering & Construction Division did not have this Certificate on file and obtained it after requested for audit procedures. In addition, Certificates were not provided for the period(s) from March 1, 2005 through March 1, 2007.
- For Project M-0260 H2 Texas Medical Center Hermann Drive Segment Two, the Certificate provided for the period from March 1, 2007 to March 1, 2008 for the contractor, Texas Sterling Construction, was dated October 11, 2007. Based on this, it appeared that the Engineering & Construction Division did not have this Certificate on file and obtained it after requested for audit procedures.

Performance, Payment, and Maintenance Bond Coverage

RESULTS AND RECOMMENDATIONS

Performance, Payment, and Maintenance Bond Coverage

Per review of the TCB contract, the CM contracts, and a sample of the Construction Contractor contracts for the four projects selected for compliance testing, we noted that performance, payment, and one-year maintenance bonds are contractually required for construction contractors for contracts over the value of \$25,000. The bonds must be for 100 percent of the Original Contract Price and in accordance with conditions stated on standard City Performance, Statutory Payment, and Maintenance bond forms. Bonds may be obtained from the Contractor's usual source and the cost for the bonds is included in the contract price.

TCB Performance and Payment Bonds

We obtained contract C55495 between the City of Houston and J.F.Thompson (now TCB) noting that the agreement is for Professional Engineering Services for a Program Management for Storm Water Program. Jefferson Wells noted that no performance and payment bond requirements were included in the contract.

Additional amendments to this contract (ordinance numbers 05-0442, 06-0498, and 07-0026) also do not provide for performance and payment bonds.

Contractor Performance and Payment Bonds

For each of the following construction contractors we obtained signed copies of the executed performance, payment, and maintenance bonds to determine if adequate bond coverage had been obtained by the Engineering & Construction Division and that such coverage was being maintained:

#	Contractor Name	Contract	Project Reference	Project Name	Original Contract Price
1	D.L. Elliot Enterprises	C56762	M-0254	Timbergrove	\$7,364,010
2	Conrad Construction	C56991	M-0255	Braes Blvd	\$9,944,839
3	Texas Sterling Construction	C56051	M-0771 K1	Kirby Drive	\$12,853,470
4	Texas Sterling Construction	C57084	M-0260 H2	TMC Hermann Dr	\$8,775,788

Results

For each of the construction contracts above we obtained and reviewed copies of the executed performance, payment, and maintenance bonds provided. We observed that adequate bond coverage was obtained without exception.

Monitoring of MWBE Compliance

RESULTS AND RECOMMENDATIONS

Monitoring of MWBE Compliance

The following section discusses the procedures performed to verify that MWBE compliance participation was being monitored by the Engineering & Construction Division in conjunction with the AACC.

Monitoring of MWBE Compliance

Per discussion with members of the Engineering & Construction Division, while MWBE utilization to date was included on each Pay Estimate; MWBE compliance participation was monitored directly by the AACC.

The City's AACC website notes the following with regard to the monitoring of compliance:

“Contract Compliance staff monitor MW/DBE activity on City construction contracts with MW/DBE goals. During final close out of each construction contract with an MW/DBE goal, the section verifies payments to MW/DBEs. A new MWDBE Management system has been implemented to monitor all MWDBE utilization and verification of payments online. The web-based software system is available to all City departments, MWDBE's, and contractors”.

On-line System

Per discussion with members of the AACC, the MWBE Management and Contract Compliance B2Gnow (Business to Government) on-line system went live in June 2004. We noted that contractors input their information related to qualifying payments to suppliers and subcontractors directly into the on-line system. The system generated the following types of reports:

1) Contract Audit: Audit Summary for Total Contract (Audit Summary)

This report included the period covered by the contract, Award, Award Percent, Actual, Actual Percent, Difference (Actual – Award) separated by Payments to Prime, Credited Payments (Prime + Sub), Credited DBE payments, Credited MWBE payments, Credited SBE payments, as well as Contractor progress percentages, and subcontractor progress percentages.

The report also included a list of all subcontractors included by the Prime Contractor detailing whether certified payroll logs were required, goal type (i.e.MWBE) contracted percentage, actual percent, and actual payments.

RESULTS AND RECOMMENDATIONS

2) Contract Management: Audit History

On a separate line item for each month the contract had been in effect, the Audit History report included the Audit Period, Date Posted, amount Paid to Prime, Total Lines (signifying the number of subcontractors), subcontractor payments Reported By Prime, number of subcontractors Not Reported By Prime, Confirmed by Sub, Not Confirmed by Sub, and Disputed by Sub.

Using this report, one can quickly determine if a Prime contractor reported subcontractor participation for MWBE purposes. If the number “0” appeared in the Not Reported by Prime line, then the Prime contractor reported subcontractor activity according to MWBE requirements. If a number other than “0” appeared, this was the number of subcontractors for which activity had not been reported for that period.

It should be noted that if a Prime contractor was behind in reporting for a period of time and then caught up, the number “0” would appear in each respective audit period’s line for those months entered. Thus, this was a snapshot of where the Prime Contractor was at the time this report was generated.

Contract Management: Audit History Report Issue

During our testwork and discussion with members of the AACC, we noted that for some contracts, the Audit History report did not capture all of the payments made to the Prime Contractor. It did, however, capture all payments made to the subcontractors that were reported by the Prime Contractor. This was due to the on-line system not properly mapping between the 5-digit contract numbers that were used in the previous AFMS accounting system and the new 10-digit number used in SAP. AACC is working with their B2G contractor to correct this. As a result, on these contracts, AACC was unable to tie the individual monthly payments per the Contract Management: Audit History report directly to the amounts paid to the Prime Contractor for the Pay Estimates tested for each respective contract and alternative measures were needed.

Certified Payrolls

While certified payrolls are required on construction type contracts, they are not required on professional services type contracts (i.e. Construction Management). In instances where certified payrolls were required to be submitted, the contractors submitted these directly to the AACC. These payroll submissions were recorded on a Certified Payroll Audit Log which included the Payroll Week Ending Date, Payroll Status, Weekly Statement of Compliance, and a column to denote which payrolls were selected for audit by the AACC compliance officer. AACC compliance officers randomly selected one out of every 4-5 payrolls to audit for accuracy.

A complete Certified Payroll Audit Log served as evidence that the actual weekly payroll certifications were provided to AACC.

RESULTS AND RECOMMENDATIONS

Sample Selection

The following lists a cross-section of contractors representing the various roles held by non-City of Houston firms in the SWMP:

Project	Project No.	Contract	Contractor
Timbergrove	M-0254	C56762	D.L. Elliot Enterprises
Braes Blvd	M-0255	C56991	Conrad Construction Co.
Braes Blvd	M-0255	C56947	Carter & Burgess (CM)
Kirby Drive Segment 1	M-0771	C56051	Texas Sterling Construction
Kirby Drive Segment 2	M-0771	C60067	Total Contracting Limited
Kirby Drive Segment 2	M-0771	C61619	ATSER (CM)
TMC – Hermann Segment 4	M-0260	C55872	Oscar Renda
TMC – Hermann Segment 2	M-0260	C57084	Texas Sterling Construction
TMC – Hermann Segment 1	M-0260	C56463	Texas Sterling Construction
TMC – Hermann Segment 2	M-0260	C57103	SES Horizon Consulting (CM)
SWMP Project Management	M-0220	C55494	J.F. Thompson / TCB (CM)

Note: (CM) represents a contractor providing construction management professional services.

Procedures Performed / Results

For each above contractor, we performed the following procedures:

- Obtained and reviewed the Contract Audit: Audit Summary for Total Contract noting that the amount reported met or exceeded the award percentage agreed to within the respective contract. No exceptions noted.
- Obtained and reviewed the Contract Management: Audit History report noting that the Audit Periods listed matched the pay estimate history for the respective contract. Amounts agreed with the exception of the following contracts, C56947, C56051, C61619, C57103, and C55495. See alternative procedures below.
- Reviewed the Not Reported by Prime lines to determine if there were any outstanding periods (beyond the current reporting period) for which subcontractor payments had not been reported. No exceptions were noted as of June 30, 2007.
- If applicable, obtained and reviewed the Certified Payroll Audit Log and determined whether the first payroll week ending date corresponded to the initial Pay Estimates tested. In addition, reviewed the Certified Payroll Audit Log to ensure there were not gaps in sequence. No exceptions noted.

RESULTS AND RECOMMENDATIONS

Alternative Procedures Performed / Results

- For contracts in which we were unable to tie the individual monthly payments per the Contract Management: Audit History report directly to the amounts paid to the Prime Contractor, we reviewed the Contract Compliance Action Sheet kept by the AACC that serves as a log of communication to the prime contractor. We also reviewed related correspondence between the Prime Contractor and the AACC to determine whether AACC was monitoring MWBE compliance on the respective contract. Based on our review of this correspondence, it appeared that AACC was monitoring compliance with MWBE goals.

Overall Results

Based on the above procedures performed, the AACC was monitoring the MWBE compliance participation for all contracts tested.

Process Improvement Recommendation

Recommendation: Complete the mapping of the legacy contract numbers used in AFMS to the new contract numbers used in SAP within the On-Line MWBE System

We recommend that AACC continue to work with their B2G contractor to complete the mapping between the legacy 5-digit contract numbers used in the previous AFMS accounting system and the new 10-digit number used in SAP. That mapping will allow AACC to efficiently determine whether all individual contractor and subcontractor payments are captured by the on-line system and accurately verify MWBE participation percentage utilization.

Basis for Recommendation:

During our testwork and discussion with members of the AACC, we noted that for some contracts, the Audit History report did not capture all of the payments made to the Prime Contractor. It did, however, capture all payments made to the subcontractors that were reported by the Prime Contractor. This was due to the on-line system not properly mapping between the legacy 5-digit contract numbers that were used in the previous AFMS accounting system and the new 10-digit number used in SAP. AACC is working with their B2G contractor to correct this. As a result, on these contracts, AACC was unable to tie the individual monthly payments per the Contract Management: Audit History report directly to the amounts paid to the Prime Contractor for the Pay Estimates tested for each respective contract. This required alternative procedures to be performed.

Views of Responsible Officials

EXHIBIT I



CITY OF HOUSTON
Department of Public Works &
Engineering

Interoffice

Correspondence

To: Annise Parker
Controller

From: Director

Date: October 30, 2008

CC:

**Subject: STORM WATER MANAGEMENT
PROGRAM PERFORMANCE AUDIT**

We have completed our response to your performance audit of the Storm Water Management Program for the period December 2003 through June 2007. We appreciate the following recommendations made by your auditors:

Recommendation #1: Communication of Final Approved Amounts for Monthly Pay Estimates

PWE should work with its Accounts Payable group and/or the Information Technology Department to obtain read-only rights for the Assistant Project Managers (APMs) so they can determine both the date contractor related pay estimates have been paid and the final approved amount. This would allow the APMs to approve the pay estimates in the CIPMS system to ensure that all future changes are made on a go-forward basis only. This will improve the accuracy of CIPMS and minimize confusion and disputes that occasionally occur due to construction managers and inspectors approving outdated DCRs throughout the month.

Response:

We disagree with this recommendation. APMs prepare the original pay estimates and, based on management's review, the accounting or supporting data may be changed multiple times prior to final approval and payment. Any changes must be recorded in CIPMS prior to the next pay estimate being prepared so that the cumulative project information is consistent. Management has evaluated this process and prefers to rely on copies of the finalized pay estimates that provide details of any changes made and the required approvals. SAP screens do not provide the line item detail, approvals and/or authorizations.

As noted elsewhere in the report the pay estimate turnaround time was extended during the SAP installation period which extended the time before finalized documents were available to the APMs. Process time for this function has now returned to pre-SAP levels.

Recommendation #2: Inclusion of Certification of Payment to Subcontractors & Suppliers.

To ensure the City is protected from instances of a subcontractor claim that they were not properly compensated by a prime contractor operating as an agent of the City, we recommend that PWE continue their effort to locate Certifications of Payment to Subcontractors & Suppliers not included with the respective interim pay estimate packages. Going forward, PWE should ensure that these are received on a monthly basis before the

*Views of Responsible
Officials*

EXHIBIT I

pay estimates are approved.

Response:

PWE requires the Certifications of Payment to Subcontractors & Suppliers forms be completed, signed and submitted prior to pay estimate approval in compliance with the General Conditions of the construction contracts examined. As noted in the report section titled "Basis for Recommendation" certifications not found in the file copies of the pay estimate packages had been separated from the packets and placed in separate contract files. Management now requires a copy of the certification to be attached to, and filed with, the pay estimate documents.

Recommendation #3: Strengthen Internal Control Requiring Separate Individuals To Sign In Different Signature Blocks On The Pay Estimate.

We recommend that the internal control requiring separate individuals to review and indicate approval through signature in the appropriate signature block be consistently followed in order to fully realize the benefit of a check and balance control system.

Response:

We agree. PWE's system of counter signatures was implemented to enhance the checks and balances in place. The PWE pay estimate preparation, review and approval process requires five signatures:

1. Prepared by
2. Checked by
3. Reviewed by
4. Submitted by
5. Approved

Certain individuals are authorized to sign in more that one capacity and may have to do so in order to keep the process going. Vacations, illness, prior business commitments et al. change day-to-day operations and a qualified alternate is chosen. Management will review the authorized signatories and evaluate the need for increasing the number of persons authorized to sign the various approval levels.

Recommendation #4: Certificates of Insurance Coverage

Evidence of insurance coverage for all contractually-required types of insurance is inconsistently maintained by the PWE Engineering & Construction Division. Lack of contractually-required insurance coverage by a City contractor could expose the City to risk of loss in the event of an accident or incident on a jobsite.

We recommend that the PWE Engineering & Construction Division develop a database to track all contracts requiring Certificates of Insurance from contractors including types of required coverage, amounts of required coverage, insurer, insurer rating, period covered by most recent certificate date, and date of next required certificate. An individual, perhaps in Document Control, should be assigned to monitor the status of contractor insurance certificates and coordinate with either the Project Managers or contractors to ensure that current Certificates of Insurance are on file within PWE at all times that project work is underway.

Response:

We disagree with this recommendation. Coverage dates for Certificates of Insurance are recorded in CIPMS and reported monthly on the Pay Estimate cover sheet. As reported in the "Construction Contract Unit Price Process Overview" section of the report, the Project

*Views of Responsible
Officials*

EXHIBIT I

Manager's review of monthly pay estimates includes a review of the coverage dates; expired coverage is reported to the contractor and payment may be delayed.

In each reported instance where no certificate was on hand the insurance agents for the vendors confirmed that required coverage was in place. No lapse in coverage was reported.


Michael Marcotte, P. E. DEE

cc: Waynette Chan, Chief of Staff
Reid Mrsny, Senior Assistant Director
Tim Lincoln, Senior Assistant Director
Godwin Okoro, Deputy Assistant Director

**Views of Responsible
Officials**

EXHIBIT II



CITY OF HOUSTON

Office of the Mayor

Interoffice

Correspondence
Affirmative Action and
Contract Compliance
Division

To: Annise Parker, Controller

From: Velma Laws, Director

Date: November 12, 2008

Subject: JWI Audit Report Response

Thank you for providing me with the opportunity to respond to the findings of the Jefferson Wells Audit. The overall results of the audit were that "AACC was monitoring the MWBE compliance participation for all contracts tested."

There was, however, a Process Improvement Recommendation that we "complete the mapping of the legacy contract numbers used in AFMS to the new contract numbers used in SAP within the On-Line MWBE System."

Action on this initiative has been ongoing. Affirmative Action team members; along with representatives from the ERP team; and our contractor, B2G Now have been working to 1) obtain current contract/purchase order numbers for all active projects, and 2) obtain data on current payments to prime contractors from the SAP system.

Of 1,232 active contracts, we are missing contract or purchase order numbers for 28. Our goal is to complete the mapping of the legacy contract numbers by November 21, 2009.

We have made substantial progress in reconciling the data pulled from SAP regarding payments to prime contractors. We will continue to work with ERP and B2G Now to resolve any remaining discrepancies.

If you have any questions or need additional information, I can be reached at 713.837.9015 or via cell at 713.557.2560.

cc: Steve Schoonover
Siria Harbour

11/08:20

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*Views of Responsible
Officials*