



Richmond City Council

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OFFICE OF THE CITY AUDITOR

REPORT # 2010-03

Audit Report
of the

**Department of
Community Development
Bureau of Permits and Inspections
Construction Permits and Inspections Division**

OFFICIAL GOVERNMENT REPORT

Richmond City Council

OFFICE OF THE CITY AUDITOR

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*Committed to increasing government efficiency, effectiveness,
and accountability on behalf of the Citizens of Richmond.*

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City of Richmond
City Auditor

Executive Summary

November 12, 2009

The Honorable Members of Richmond City Council
The Richmond City Audit Committee
Mr. Byron C. Marshall, CAO

Subject: Community Development – Permits & Inspections Audit

The City Auditor's Office has completed an operational audit of the Community Development Department - Construction Permits and Inspections Division (PI). This audit was conducted in accordance with Generally Accepted Government Auditing Standards. Overall objectives of the audit were to:

- Evaluate the effectiveness and efficiency of the Permits and Inspections' operations;
- Verify compliance with laws, regulations and policies; and
- Determine the existence and effectiveness of internal controls.

Findings

- In 2007, the permit and related service fees increased by 15.5%. The purpose of the fee increase was to offset costs incurred for additional inspection and permit intake staff to handle increased workload demands. Contractors and developers agreed to the fee increase as long as 100% of the increase went to improve service delivery. The rationale for the fee increase is not exactly known since the City was collecting (on average) \$1.5 million per year in excess of PI expenditures prior to the 15.5% fee increase. This would indicate that the City had the ability to hire additional staff to improve the timeliness of issuing permits and inspections without increasing fees.
- During the period of FY07 to FY08, the expenditure per permit increased by 24%. Yet, the number of permits decreased by 3% as depicted in the following table:

	FY06	FY07	FY08
Expenditures	\$3,271,724	\$3,491,808	\$4,177,325
Permits Issued	15,837	14,694	14,273
FY Percent Decrease		7%	3%
% Decrease FY06/Fy08			10%
Expenditure Per Permit	\$207	\$237	\$293
FY Percent Increase		14%	24%
Percent Increase FY06/FY08			42%

- Written policies and procedures provide guidance to employees to perform their duties consistently in conformance with policies. Also, they can be used as an effective employee training tool. While PI has a policies and procedures manual, it needs to be updated and formally distributed to staff for their reference. Without properly updated written policies and procedures, compliance cannot be evaluated.
- PI does not formally monitor individual employee productivity and time accountability except for the Plan Review section, which manually monitors time required for completed reviews each day. Without a formal system of providing management with individual productivity/time measurements, employee performance and process efficiency cannot be objectively evaluated.
- Currently, PI does not have a work quality review program. In this situation, inferior quality of work or lack of performing assigned work may not be detected and addressed in a timely manner. This is significant, as an investigation conducted by the City's Office of the Inspector General in September 2008 identified two Community Development employees spending inadequate time performing their duties. A work quality program would have identified this abuse. An inadequate inspection could result in approving a structure that is not safe.
- The Permits and Inspections Division utilizes an 18 year old COBOL based computer system (Cornerstone) to facilitate all stages of the permitting and inspections process. The computer system is expensive to maintain and doesn't provide adequate management information reporting without extensive manual intervention.
- In November 2008, the City Council passed an ordinance to increase the fees charged on construction permits, inspections, and related services by approximately five percent for purchasing a new computer system. The amount actually allocated was \$212,000 which represented fees collected during fiscal year 2009.

- A previously failed inspection requires a re-inspection. The City has established re-inspection fees to cover the relevant costs. Inspectors have discretion to charge the re-inspection fee. During fiscal year 2008, 16,162 failed inspections were noted, thus requiring a least one re-inspection trip. Of the 16,162 unapproved inspections, only 40 commercial and 284 residential re-inspections were charged re-inspection fees. This indicates that the City may be losing a substantial amount of revenue.

The City Auditor's Office appreciates the cooperation of the City staff during this audit. A written response to the report with an action plan and target dates for implementation has been received and is included with this report. Please contact the City Auditor's Office if you have any questions or comments.

A handwritten signature in black ink, appearing to read "Umesh Dalal", written in a cursive style.

Umesh Dalal, CPA, CIA, CIG
City Auditor

COMPREHENSIVE LIST OF RECOMMENDATIONS

#		Page
1	<i>Conduct a study on how much it actually costs to issue permits and conduct inspections.</i>	12
2	<i>Adjust fees to provide necessary revenue to offset operational expenses.</i>	12
3	<i>Review and update the policy and procedures manual.</i>	13
4	<i>Develop and implement a work quality review program for various areas as follows:</i>	
	<u>Work Quality Review Recommendation for Permit Intake Review:</u>	15
	<i>(1) Develop a check list to facilitate the review of processed permit applications. (2) Periodically review a sample of permit applications processed by the front counter personnel to ensure completeness and accuracy.(3) Maintain documented results to be utilized as a measure of effectiveness and as an individual performance evaluation tool.</i>	
	<u>Work Quality Review Recommendation for Plan Review:</u>	15
	<i>(1) Develop a check list to document the review of completed plan reviews. (2) Periodically reexamine a sample of plans approved by plan review personnel to ensure completeness and accuracy of the review. (3) Verify the quality and completeness of at least one set of complex plans for each discipline and reviewer (building and trades) each month. (4) Maintain documented results to be utilized as a measure of effectiveness and as a performance evaluation tool.</i>	
	<u>Work Quality Review Recommendation for Inspections:</u>	16
	<i>(1) Develop a check list to formalize the review of completed inspections. (2) Conduct adequate number of appropriate quality reviews of completed residential and commercial projects in a timely manner. (3) Document the review and forward a written report to the inspector's manager for review. (4) Maintain documented results and utilize them as measures of effectiveness during performance evaluations. (5) Require all inspectors to record accurate arrival and site departure times on inspection logs. (6) Capture individual productivity and time data in a form that can be readily used for individual performance evaluation purposes and in establishing inspection benchmarks that can be used for determining staffing needs.</i>	
5	<i>Develop measures of efficiency and effectiveness in order to provide valuable information on the progress toward achieving the program's mission.</i>	17
6	<i>Modify process to account separately for permits with status changes (active to pending to active) to prevent them from being counted multiple times.</i>	21
7	<i>Refine performance measures by tracking and reporting building and trades permit issuance times separately.</i>	23
8	<i>Define the performance measure activities that qualify as "inspection."</i>	24

9	<i>Report the “Number of Inspections Conducted” performance measure using the new definition of “inspection.”</i>	24
10	<i>Report the “non-inspection” activities separately.</i>	24
11	<i>Research an enterprise permit tracking and inspections system in order to make an educated decision on what system components will be most beneficial to the operations and management of PI and other involved departments and agencies.</i>	27
12	<i>In the new system, provide for the electronic submission, tracking, retrieval, and storage of permit applications, related documentation, and construction plans.</i>	27
13	<i>Obtain relevant, accurate data and monitor productivity and efficiency of activities for all employees using appropriate performance standards and/or benchmarks.</i>	28
14	<i>Develop and initiate a Customer Satisfaction Program to gather, analyze, and monitor customer satisfaction data.</i>	29
15	<i>Use the citizen satisfaction rating as one of the performance measures.</i>	29
16	<i>In order to allow inspectors to spend more time performing field inspections, provide an administrative support person to handle non-inspection tasks.</i>	31
17	<i>Mandate use of laptops and printers in the field to complete inspection tickets.</i>	32
18	<i>Provide additional training on the use of laptops in the field.</i>	32
19	<i>Require that all inspection results be posted to the permit tracking system at the completion of the inspection before going to the next assignment.</i>	32
20	<i>With the replacement of the current permits and inspections processing system, consider including a cashiering system.</i>	33
21	<i>Administer and enforce Section 14-6 of the City Code which requires a final accounting of the cost of construction of all permitted projects before a final inspection approval is issued.</i>	35
22	<i>Enforce the re-inspection policy and charge the fee in a consistent manner.</i>	36
23	<i>Develop and initiate a process to follow-up on stop work orders to include on-site inspections.</i>	37
24	<i>Develop and implement a process to follow-up on expired permits to include a visual inspection.</i>	38
25	<i>Utilize a secured on-site document disposal company to dispose of duplicate plans.</i>	39

Introduction, Objective and Methodology

Introduction

The City Auditor’s Office has completed an operational audit of the Community Development Department - Construction Permits and Inspections Division (PI). This audit covers PI activities during the 12 month period ended June 30, 2008.

This audit was conducted in accordance with Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States. Those standards provide a reasonable basis for the auditor’s conclusions regarding the internal control structure of the Permitting and Inspections Division and the recommendations presented.

Audit Objective

Overall objectives of the audit were to:

- Evaluate the effectiveness and efficiency of the Permits and Inspections’ operations;
- Verify compliance with laws, regulations and policies; and
- Determine the existence and effectiveness of internal controls.

Methodology

To complete this audit, the auditor performed the following procedures:

- Gathered and reviewed background information;
- Interviewed staff and management;
- Reviewed and evaluated policies and procedures;
- Reviewed performance indicators and standards utilized by other cities and counties;
- Reviewed financial and operational/performance information;
- Rode along with field inspectors; and
- Performed other audit procedures as deemed necessary.

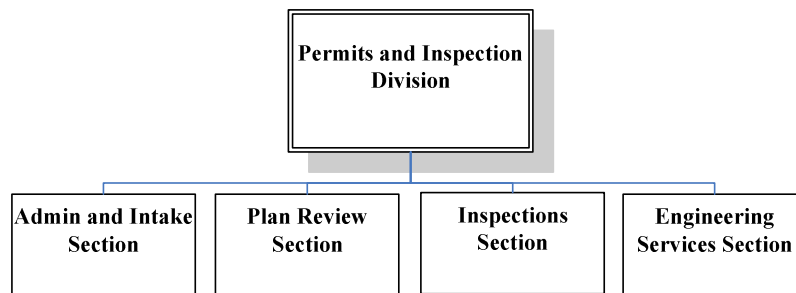
Background Information

Overview of the Program

The Permits and Inspections Division provides a critical function in ensuring the public safety, health, and welfare of citizens, business owners, contractors, and developers living and working in the City. This is achieved by ensuring that all construction within the City conforms to the Virginia Uniform State Building Code (USBC), laws, ordinances, rules, and regulations. To accomplish this goal, PI performs construction plan reviews; issues construction permits through application; conducts mandatory work inspections; and issues Certificates of Occupancy for the satisfactory completion of the permitted project. The Certificate of Occupancy generally means that the building complies with all codes and regulations applicable at the time of construction.

Organizational Structure

The following organizational chart represents the management structure of the Permits and Inspections Division during the review period.



Administrative and Intake (front counter) Section

The front counter manages a multitude of support activities as follows:

- Processes and routes permit applications and plans;
- Issues permits not requiring plan review;
- Conducts preliminary attribute plan reviews;

- Processes fee payments and refunds;
- Performs financial reconciliations;
- Responds to 311 contacts;
- Issues reports under the Freedom of Information requests; and
- Maintains monthly and yearly statistical reports (internal and external), etc.

Generally, the building permitting process begins at the front counter. The technician can issue the permit upon application unless plan reviews are required. In addition, if the permit application requires the submission of plans and the plans are relatively simple, PI has implemented a “Walk-Through” program which can facilitate the review of simple plans and issuance of a permit the same day. Other permits requiring complex review of plans, either by PI or by other relevant departments, take longer to issue.

The front counter also monitors the progress of pending permit issuance to ensure timely processing. This critical function was established to prevent unnecessary delays in issuing permits which may result in a financial loss to the permit applicant.

Plans Review Section

This section conducts comprehensive reviews of building related construction plans to ensure compliance with the applicable codes. Auditors found that all plan reviewers hold proper credentials and/or State Plan Review Certifications.

Inspections Section

The Inspections Section conducts mandatory inspections in order to verify that all construction related work conforms to approved plans and applicable codes.

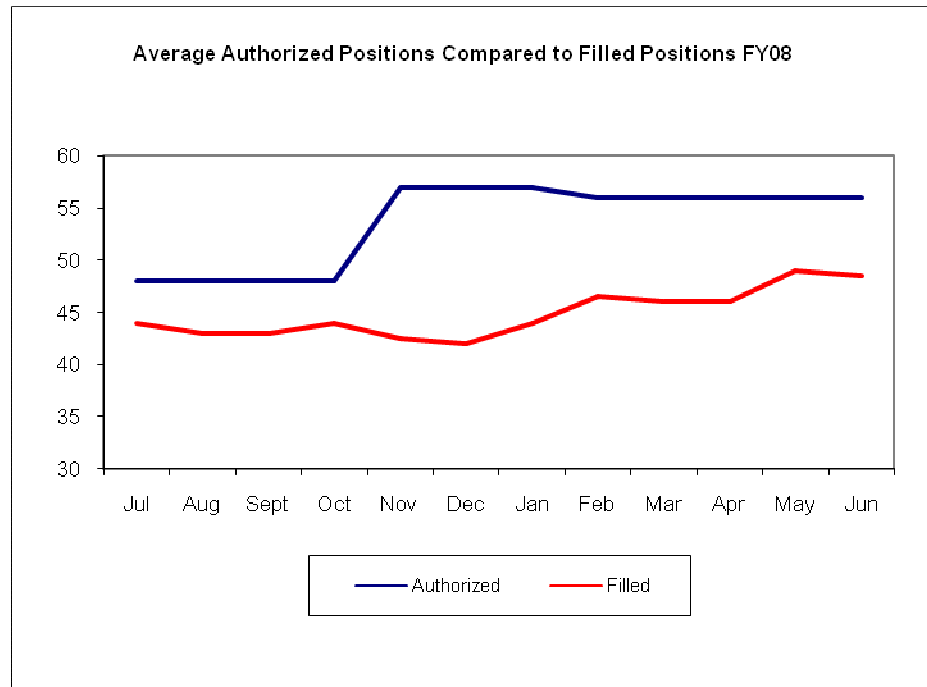
Engineering Services – (Storm Water Management)

The Engineering Services Section reviews and inspects site (land related) plans to ensure compliance with Federal Emergency Management Administration flood regulations, wetlands approvals, erosion and sedimentation control ordinances, and the Chesapeake Bay regulation. Engineering Services also issues construction related permits such as “Work in Streets and Alley,” “Land Disturbing Activity,” sewer connections, and administrative encroachment requests. In February of 2009, Engineering Services became a separate division called the Storm-water Management Division.

Staffing

During the period under review, the Permits and Inspection Division had between 48 to 57 authorized positions. However, because of various factors such as voluntary separations, one termination, hiring freeze, and budget cuts, PI was not able to fill all authorized positions. The following chart represents the number of authorized positions as compared to the average number of positions filled during the period reviewed.

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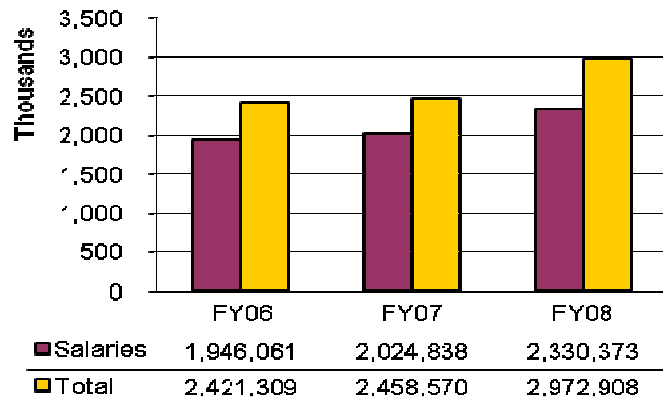


In October of 2007, PI had 44 filled positions out of 48 authorized positions. This included six Engineering Services (Storm Water Management) positions. In February 2009, five of the six Engineering Services positions were transferred out of Permits and Inspections when a separate division - Storm Water Management - was created. The sixth position was eliminated in June, 2009. Also, beginning in June 2009, one vacant GIS technician position, one vacant drafting technician position, and seven vacant inspector positions were eliminated. The seven inspector positions eliminated included four building, two electrical, and one mechanical inspector. By November 2009, PI had a total of 48 authorized positions, (which included the five Storm Water Management positions) all of which have been filled with the exception of the Commissioner of Buildings.

Budget

The following chart represents the cost of operations for FY 2006 through FY 2008 which compares salary expense to total expenditures (includes only PI assigned personnel salaries).

Comparison of Salary Expense to Total Expenditures



There was a noticeable increase in expenditures in FY08 over FY07. Salaries increased in FY08 by \$305,535 (15%) over FY07 and non-salary expenditures increased by \$208,803 (48%). The salary increase (with offsets from employee separations) was the result of:

1. Reclassifying inspector positions along with the development of a career ladder in order improve turnover rate experienced (July 2007);
2. The hiring of ten inspectors, two drafting technicians, one GIS analyst, one Engineering Services (Storm Water) supervisor and one Engineering Services (Storm Water) site inspector positions during the period 4/1/07 through 4/30/08;
3. Promoting a plan reviewer to an operations manager (February 2008);

4. Normal salary increases; and
5. The upgrading of two senior customer service representatives to drafting technicians.

The increase in non-personnel expense resulted from: (1) increased vehicle expenses related to the inspections section; (2) training expenses due to code version changes, (3) supplies for new hires; and (4) hiring temporary employees to box up documents (plans, applications, etc.) for storage as part of redesigning the PI office.

Permit Fee Basis

Building permit fees are typically based on the higher of the value of construction (as provided by the applicant) or the value as determined by R.S. Means, a construction value-estimating software.

Before a final inspection is issued, the building inspector assigned to the project is required by City Ordinance to have the permit holder sign an affidavit that the value of construction originally reported is correct. If the value increases, additional fees are collected; if the value decreases, a refund is issued.

The current system is not capable of accurately tracking economic values of construction in the City

PI's computer system is also not capable of accurately tracking the construction values for reporting purposes. The value reported to Richmond Works includes the original value associated with retracted and expired permits where the work may or may not have been actually performed. In addition, each time a permits changes from active to pending to active status – due to project modification - the system will report that a new permit was issued and the entire cost of construction

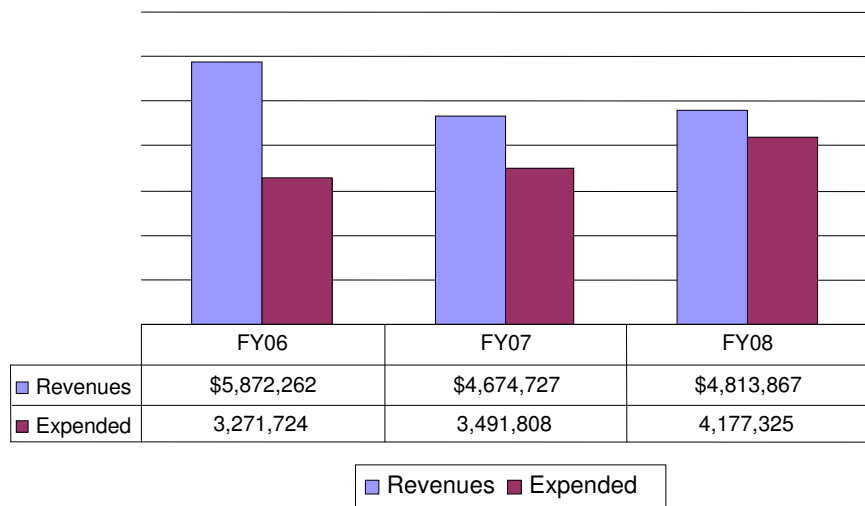
is reported an additional time. Therefore, the data obtained from this system cannot be used to gauge construction economic activities in the City.

Observations and Recommendations

Revenue from Permits and Related Services

Revenue from permit fees and related services was used, in part, to directly offset the salaries and operating expenses of the Bureau of Permits and Inspection as well as zoning personnel and some city planning employees. The following chart reflects revenues received during fiscal years 2006 through 2008 compared to expenses charged against fee revenue. Any excess in revenue over expenditures remains in the general fund. For the fiscal years 2006 through 2008, revenues exceeded expenses by \$4,419,999 or by an average of about \$1.5 million per year.

Fee Revenue Compared to Expenditures
 Source: Advantage Financial System



15.5% Fee Increase

Prior to October 2007, the Division was perceived to be under-staffed to conduct inspections and issue permits in a timely manner. On November 26, 2007, an ordinance was passed that allowed for the increase in permit and related service fees by 15.5%. The purpose of

the fee increase was to offset costs incurred for additional inspection and permit intake staff to handle increased workload demands.

***Richmond
developers did not
receive adequate
value for the 15.5%
fee increase***

In November 2007, the general fund budget was amended by appropriating \$400,000 in anticipation of increased revenue to the Department of Community Development for the purpose of funding six inspector positions, two drafting technicians, one GIS analyst, and funding for a third-party plan review contract. This move was supported by the developers and contractors operating in the City. A “Statement of Support” was signed by 32 contractors and developers agreeing to the increase as long as 100% of the increase went to improve service delivery. The statement went on to read that the fee increase would be used to hire 2 building inspectors, 2 electrical inspectors, 1 mechanical inspector, 1 plumbing inspector, 3 additional permit intake staff, one information technology support person (GIS), and a third party plan review contract to handle overflow.

The following are the results of the fee increase:

- Two drafting technicians and four of the six inspectors were hired.
- The GIS analyst position was filled, but utilized only 50% of the time by PI.
- One of the four filled inspector positions was vacated in July 2008 and eliminated in June 2009.
- The two construction building inspector positions added in November 2007 (never filled) were also eliminated in June 2009.

Therefore, based on the above, it appears that the City did not keep its promise to augment inspection and permitting staffing.

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During the period from November 2007 through June 2008, PI did not significantly increase the percentage of permits issued between one and seven days and between eight and thirty days of application. Building permits, especially residential, issued after June 2008 displayed a marked increase in the percentage issued within seven days. The increase in inspection staff decreased the backlog in electrical and plumbing inspections. Overall, it is obvious that the contractors and developers did not fully receive adequate value for the increased fees.

It is noted, however, that the rationale for the fee increase is not exactly known since the City was collecting (on average) \$1.5 million per year in excess of PI expenditures prior to the 15.5% fee increase. This would indicate that the City had the ability to hire additional staff to improve the timeliness of issuing permits and inspections without increasing fees.

During the period of FY07 to FY08, the expenditure per permit increased by 24%. Yet, the number of permits decreased by 3% as depicted in the following table:

	FY06	FY07	FY08
Expenditures	\$3,271,724	\$3,491,808	\$4,177,325
Permits Issued	15,837	14,694	14,273
FY Percent Decrease		7%	3%
Percent Decrease FY06/Fy08			10%
Expenditure Per Permit	\$207	\$237	\$293
FY Percent Increase		14%	24%
Percent Increase FY06/FY08			42%

This means that with the reduction in workload, the existing staff should have been able to handle the existing workload expediently.

Recommendations:

- 1. Conduct a study on how much it actually costs to issue permits and conduct inspections.***
- 2. Adjust fees to provide necessary revenue to offset operational expenses.***

Controls and Performance Measures

Internal Controls

Internal controls need improvement

According to Government Auditing Standards, internal control, in the broadest sense, encompasses the agency's plan, policies, procedures, methods, and processes adopted by management to meet its mission, goals, and objectives. Internal control includes the processes for planning, organizing, directing, and controlling program operations. It also includes systems for measuring, reporting, and monitoring program performance.

Based on the results and findings of the audit methodology employed, auditors concluded that internal controls need improvement. The internal control deficiencies are discussed throughout the report.

Policies and Procedures

Policies and procedures manual needs updating

One of the standard internal control procedures includes having a formal written policies and procedures manual. Written policies and procedures provide guidance to employees to perform their duties consistently in conformance with policies. Also, they can be used as an effective employee training tool. While PI has a policies and procedures manual, it needs to be updated and formally distributed to staff for their reference. Without properly updated written policies and procedures, compliance cannot be evaluated.

Recommendation:

3. Review and update the policy and procedures manual.

Work Quality Review Program

Another element of internal control involves the continuous monitoring of activities through supervision. Supervision is the ongoing oversight, management, and guidance adopted by management to help ensure that the objectives are efficiently and effectively achieved. One aspect of

responsible supervision involves monitoring, reviewing, and approving the work of those performing an activity to ensure the work is performed correctly.

***PI needs to
establish a work
quality review
program***

Currently, PI does not have a work quality review program. In this situation, inferior quality of work or lack of performing assigned work may not be detected and addressed in a timely manner.

Accountability

For efficiency of operational purposes, inspectors are assigned to a specific territory. However, inspectors may work in other territories if needed. Inspectors usually leave the office to begin inspections between 8 a.m. and 9 a.m. When the inspector reaches the inspection location, he is required to note the time of day on his inspection log; completion time is also required to be recorded. During the auditor's review of logs for the month of June 2008, some arrival and departure times did not appear to be accurate and in some cases, were not recorded at all. Some inspectors recorded a flat amount of time for each inspection, which did not appear to be reasonable.

While it is granted that the time required for an inspection varies and can be influenced by a number of factors (such as the complexity of the inspection, number of individual inspections covered by one permit number, wait time for someone to grant access), the time required to conduct inspections, coupled with the number of inspection and type completed, is a valuable measure of individual productivity. This productivity measure can also be utilized to establish comparative benchmarks and for determining proper staffing levels.

This is significant, as an investigation conducted by the City’s Office of the Inspector General in September 2008 identified two Community Development employees spending inadequate time performing their duties. A work quality program would have identified this abuse. An inadequate inspection could result in approving a structure that is not safe.

Recommendation:

4. Develop and implement a work quality review program for various areas as follows:

Work Quality Review Recommendation for Permit Intake Review

- *Develop a check list to facilitate the review of processed permit applications.*
- *Periodically review a sample of permit applications processed by the front counter personnel to ensure completeness and accuracy.*
- *Maintain documented results to be utilized as a measure of effectiveness and as an individual performance evaluation tool.*

Work Quality Review Recommendation for Plan Review

- *Develop a check list to document the review of completed plan reviews.*
- *Periodically reexamine a sample of plans approved by plan review personnel to ensure completeness and accuracy of the review.*
- *Verify the quality and completeness of at least one set of complex plans for each discipline and reviewer (building and trades) each month.*
- *Maintain documented results to be utilized as a measure of effectiveness and as a performance evaluation tool.*

Work Quality Review Recommendation for Inspections:

- *Develop a check list to formalize the review of completed inspections.*
- *Conduct adequate number of appropriate quality reviews of completed residential and commercial projects in a timely manner.*
- *Document the review and forward a written report to the inspector’s manager for review.*
- *Maintain documented results and utilize them as measures of effectiveness during performance evaluations.*
- *Require all inspectors to record accurate arrival and site departure times on inspection logs.*
- *Capture individual productivity and time data in a form that can be readily used for individual performance evaluation purposes and in establishing inspection benchmarks that can be used for determining staffing needs.*

***General
Performance
Measures***

PI’s current performance measures relate to the Division’s output and the promptness of service delivery. The measures were found to be those generally used by building code departments throughout the country. Although these measures provide significant information, without comparing this information with external benchmarks, the data only provides information about changes in performance from year to year. It does not indicate if the performance is adequate.

The following are PI’s measures of output:

- Number of residential and commercial plan reviews conducted (beginning January 2008)
- Number of building permits issued
- Value of construction initially reported
- Fees collected
- Number of inspections conducted

Without benchmarking, the measures do not evaluate adequacy of performance

These measures do not address the efficiency of the operation. Measures of cost efficiency are usually expressed by the ratio of cost of inputs for each unit of output produced and are helpful in identifying areas having excessive staffing or costs related to services delivery. PI needs to develop measures of efficiency (e.g. number of inspections conducted per inspector per day; cost per inspection; time and cost to issue a permit or review plans).

The division lacks performance measures for efficiency and effectiveness of operations

Additionally, PI must develop measures of effectiveness in order to report on the results of program efforts. Measures of effectiveness are more meaningful indicators of the progress made in achieving the stated program mission. For example, the Inspection Section is charged with conducting inspections to ensure compliance with approved plans and building codes. An appropriate measure of the effectiveness of the inspection effort may be to report on the percentage of construction deficiencies corrected on the first follow-up. Another could be the percentage of inspections conducted correctly; this measure would go hand and hand with the creation of a quality review program.

Recommendation:

- 5. Develop measures of efficiency and effectiveness in order to provide valuable information on the progress toward achieving the program's mission.***

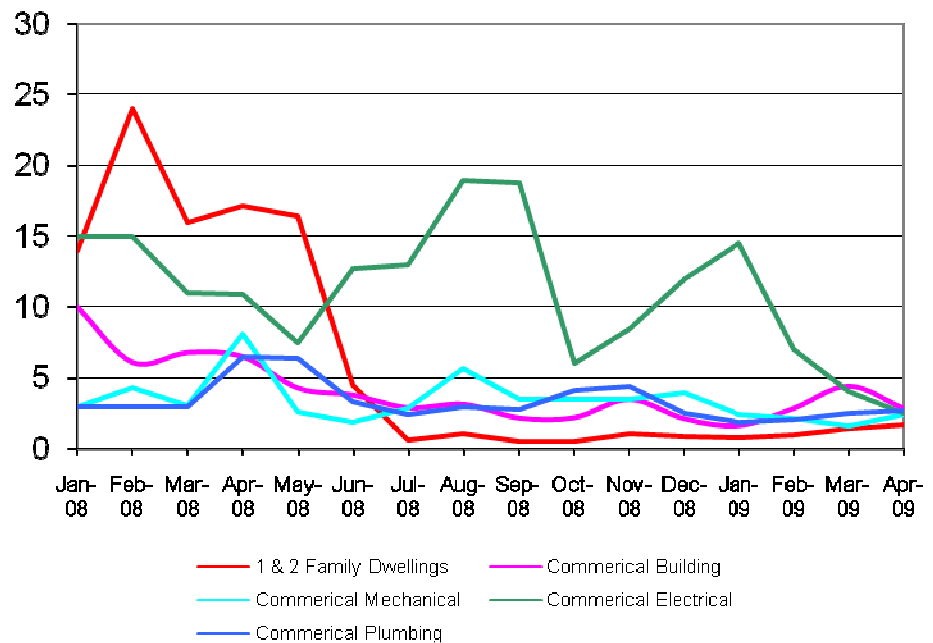
Performance Measures for Plan Reviews

The following objectives and established targets are reported as measures of promptness of service delivery:

- To review 90% of all alteration plans within ten days of submission of permit request (began January 2008).
- To review 90% of all new building plans within 20 days of submission of permit request (began January 2008).

The plan review turnaround time became a workload measure beginning in January 2008. The following chart represents the average time in days to review a set of plans, by type:

Average Days Required to Complete Plan Reviews



It is noted that these times do not reflect the review time of other divisions within Community Development and agencies (e.g. Public Works, Public Utilities, Health, Fire) involved in the issuance of a permit. Their processing times are currently outside the control of PI. With the exception of electrical plan reviews, the Plan Review Section has exceeded its overall performance targets. This may be a direct result of providing more oversight and hiring two front counter drafting technicians, thus relieving two building plan reviewers from front counter permit intake duties and allowing them to be dedicated solely to plan review.

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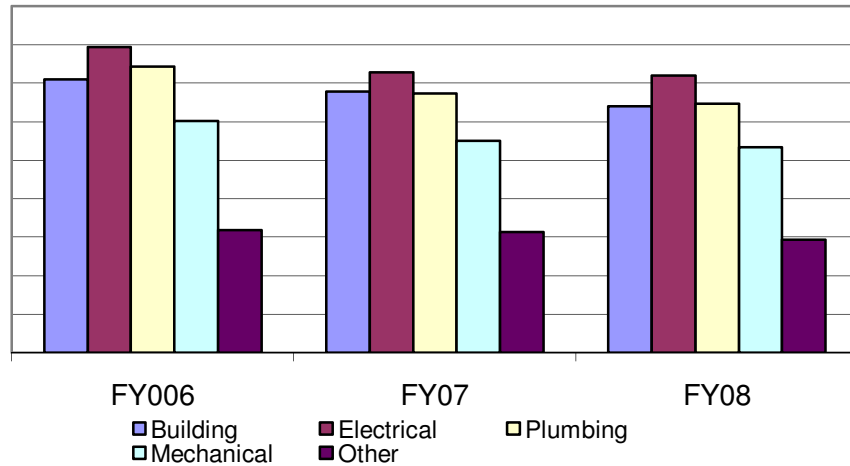
Review Type	January 2008	April 2009	Reduction	
	In Days			%
Residential Building	14	1.72	12.28	88%
Commercial Building	10	2.85	7.15	72%
Commercial Mechanical	3	2.43	0.57	19%
Commercial Electrical	15	2.5	12.5	83%
Commercial Plumbing	3	2.75	0.25	8%

During the period under review, the electrical plan review process was hampered by the temporary loss of a dedicated electrical plan reviewer. The inspections supervisor, along with inspectors having electrical plan review certifications, had been sharing the responsibility for plan review. In addition, a third-party plan review company was contracted to handle overflow electrical reviews. As of recent, the backlog has been rectified and the third-party reviewer is no longer needed.

***Performance
Measures for
Permit Issuance***

During FY08, PI issued 14,273 permits. This is a 3% drop over FY07 and 10% drop from FY06. The following chart lists the type and number of permits issued during FY06 through FY08.

Number of Permit Types Issued during FY 2006 through 2008



Permit Issued	FY06	FY07	FY08
Building	3,546	3,386	3,195
Electrical	3,971	3,635	3,598
Plumbing	3,716	3,361	3,233
Mechanical	3,011	2,748	2,669
Other	1,593	1,564	1,578
Total	15,837	14,694	14,273

Source: Permits and Inspections

The above performance measurement does not make allowance for retracted or expired permits. It was also found that the informational report from the permit tracking system on the number of permits issued may not be accurate. Permits that change status (active to pending to active) will be counted as a new permit each time the permit changes to active status. This inflates the number of permits actually issued – possibly up to 300 permits each fiscal year. This was based on a DIT review of permits which found 150 instances of changed status during

the period of July through December 2008 that were reported as new permits.

Recommendation:

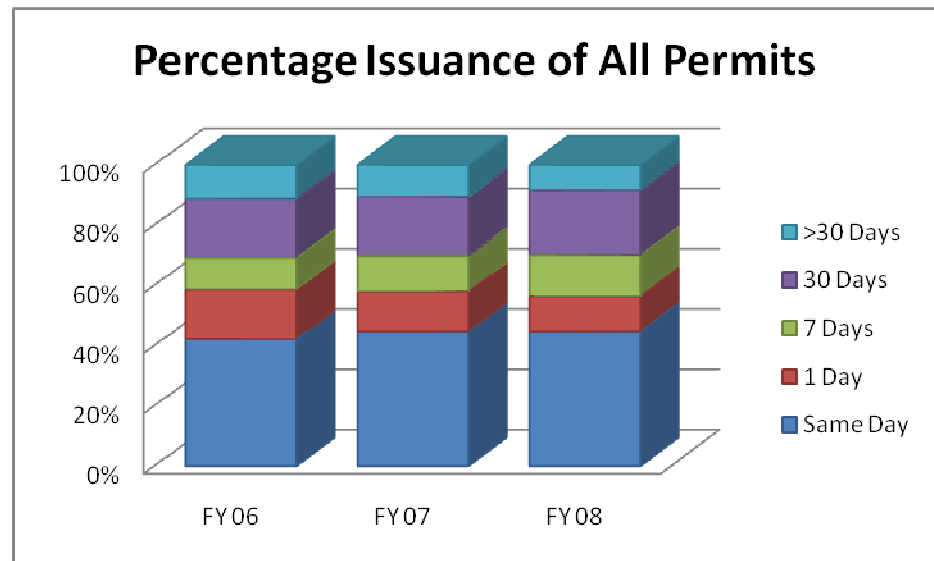
- 6. Modify the process to account separately for permits with status changes (active to pending to active) to prevent them from being counted multiple times.***

Permit Issuance

Overall, PI has met its following objectives related to the promptness of permit issuance:

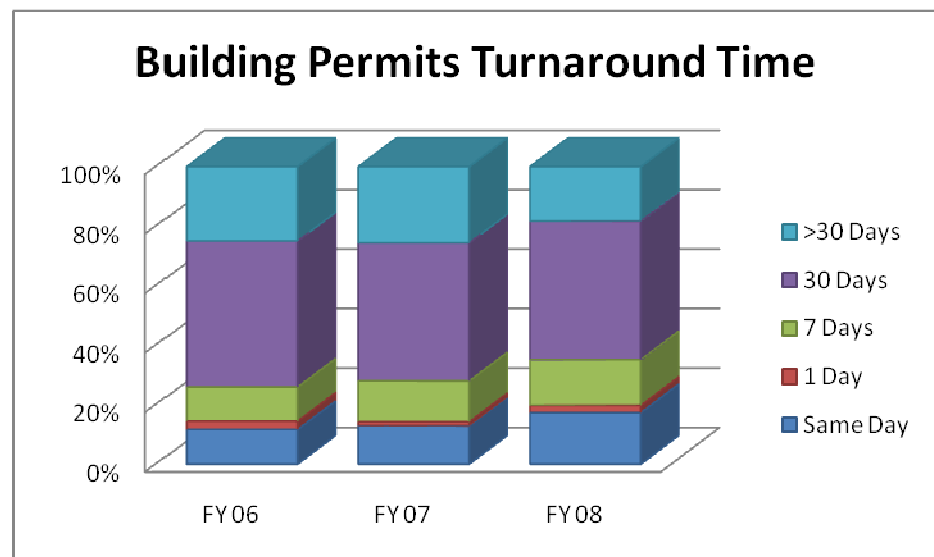
- To issue 70% of all permits within seven days of application.
- To issue 90% of all permits within 30 days of application.

The following chart reflects overall issuance of permits within a specified time during FY06 through FY08. The measure is calculated from the date of intake of the application to the date of permit issuance and is reflected in the month of issuance.



The above chart shows that, in general, the division’s performance, related to the timeliness of issuance of building and trade permits, has remained consistent over the past three years.

Further analysis reveals that the greatest increase was in the turnaround percentage related to the issuance of building permits (as compared to trade permits) as depicted in the following chart:



It needs to be noted that a delay in issuing a building permit could result in delaying a construction project schedule overall - possibly causing financial loss. The enhanced turnaround performance in building permits, especially residential, may be due to the reduction in the commercial building and commercial trade permits applications, reducing the number of commercial plan reviews. Hiring two additional drafting technicians and the re-assignment of two building plan reviewers from front counter duties may have also contributed to the increase in the seven-day turnaround of building permits. It is noted that the front counter drafting technicians are also able to review plans

of less complexity allowing for an increase in one day turnaround. The majority of trade permits for residential properties do not require plans to be submitted for review allowing for a relatively short turnaround time.

During the period under review, based on the data analyzed, it appears that most of the building permits were issued after seven days, whereas the majority of trade permits were issued within seven days of application. Comingling data related to building and trade permits provides a skewed view. Therefore, having a performance measure whose basis is issuance time for the aggregate of all permits provides misleading information about the department's performance in this area.

Recommendation:

- 7. Refine performance measures by tracking and reporting building and trades permit issuance times separately.***

***Inspections Section
Performance***

***Reported inspection
productivity appears
to be overstated***

The Inspections section uses two measures of performance. These include the “number of inspections conducted” as a workload measure and the “percentage of inspection conducted on the day requested” as a measure of promptness. In reviewing the reported statistics and supporting documentation, it was determined that the number of inspections conducted is being overstated as it includes activities that clearly do not constitute inspections (e.g. a cancelled inspection, lack of access to the project, etc.) This situation could lead to erroneous staffing decisions.

Recommendations:

8. *Define the performance measure activities that qualify as “inspection.”*
9. *Report the “Number of Inspections Conducted” performance measure using the new definition of “inspection.”*
10. *Report the “non-inspection” activities separately.*

Automation

PI Computer System Needs Replacing

The computer system is expensive to maintain and doesn't provide adequate management information reporting without extensive manual intervention

The Permits and Inspections Division utilizes an 18 year old COBOL based computer system (Cornerstone) to facilitate all stages of the permitting and inspections process. The system is becoming expensive to maintain and doesn't provide adequate management information reporting without extensive manual intervention. During the period of July 1, 2007 through June 30, 2008, the City's Department of Information Technology provided 3,034.25 hours of maintenance to Cornerstone at a cost of \$127,438.50. Also, continued support for Cornerstone could be at risk as DIT has limited expertise in maintaining a COBOL based system. Further turnover in staff having this expertise will erode the City's ability to successfully support this application internally. Only a small number of vendors may be able to support this old technology and, therefore, the maintenance of this system can get expensive. It was observed that the management of PI has to rely too heavily on manual processes to compile data and compute measures of workload and promptness of service delivery.

In November 2008, the City Council passed an ordinance to increase the fees charged on construction permits, inspections, and related services by approximately five percent for purchasing a new computer system. The amount actually allocated was \$212,000 which represented fees collected during fiscal year 2009. Each year a separate ordinance would be required to continue funding the renewal account. The Commissioner of Buildings had estimated that the new land management system could cost upwards of \$1.5 million and would be financed through a lease/purchase arrangement. The new system should also support the Bureau's Code Enforcement Division.

Industry Efforts

The Alliance for Building Regulatory Reform, a public-private partnership, was formed to identify and share best practices to streamline the nation's building regulatory process to enable communities to improve their effectiveness and efficiency by making greater use of information technology. Some of the Alliance members include seven states (including Virginia) and three local governments. Also represented are the National Association of Counties, the American Institute of Architects, the Building Owners and Managers Association, the National Association of Home Builders, and some major universities.

The Alliance recently released a white paper entitled *Best Practices in Electronic Plan Submittal, Review, Tracking, and Storage* and a companion paper entitled *Paper to Digits* which presents six key benefits derived from e-plan submission, review, tracking and storage as follows:

1. Electronic plans submittal, tracking, review and storage reduce traditional plan processing times up to 50 percent by reducing the number of physical trips to and from government offices and by making these services available 24/7/365 and enabling jurisdictions to shift staff resources to other areas in need of attention.
2. Enhanced ability of government departments to conduct timely parallel plan review rather than perform them sequentially. It is noted that the PI permitting process allows for the concurrent review of plans, but requires applicants to submit duplicate sets of plans to be distributed to different involved departments and agencies.

3. Enhanced collection of revenues owed to the jurisdiction by getting buildings up and on the tax rolls sooner.
4. Reduced or eliminated space and retrieval problems associated with storing paper blueprints.
5. Significantly reduced travel time and energy use/expenses of customers helping the community meet sustainability and green community goals.
6. Preparing communities for the adoption of future technology in a non-disruptive manner.

The new land management system should provide for much needed and timely information in order for management to make the decisions necessary to operate in the most efficient and effective manner possible. Replacing the system could directly benefit the users of this service if the system has appropriate functionality that facilitates online transactions.

Recommendations:

- 11. Research an enterprise permit tracking and inspections system in order to make an educated decision on what system components will be most beneficial to the operations and management of PI and other involved departments and agencies.***
- 12. In the new system, provide for the electronic submission, tracking, retrieval, and storage of permit applications, related documentation, and construction plans.***

***Employee
Productivity/Time
Measurement
System***

PI does not formally monitor individual employee productivity and time accountability except for the Plan Review section, which manually monitors time required for completed reviews each day. Without a formal system of providing management with individual productivity/time measurements, employee performance and process

With the exception of the Plan Review section, PI does not monitor individual employee productivity and time accountability

efficiency cannot be objectively evaluated. The measurement of individual productivity can alert management to system problems, environmental restrictions, training needs, and processes that may be hampering the employee's ability to perform in comparison to an established expectation.

Recommendation:

13. Obtain relevant, accurate data and monitor productivity and efficiency of activities for all employees using appropriate performance standards and/or benchmarks.

Service Satisfaction Measurements

Recently, the Virginia Commonwealth University's Center for Public Policy conducted a citizen survey at the City Auditor's request. Out of the 808 citizens selected for survey, 176 had a previous service encounter with the Permits and Inspections Division. Of the 176 responding, 20% rated PI service as poor, 30% rated service as fair, 44% rated service as good, and only 6% rated PI service as excellent.

PI does not have an effective, formal method of obtaining feedback for assessing service satisfaction

While PI is basically a regulatory agency, positive customer service experiences are still critical to the success of the organization. However, PI, does not have an effective, formal method of obtaining feedback for assessing service satisfaction. While PI does provide customer service comment cards at the front counter, the display holding the comment cards is not always strategically located for customers to notice.

Measures of satisfaction should be incorporated into an overall service delivery strategy. This is also indicative of the effectiveness of their operations. Measuring customer (and employee) satisfaction, will allow PI to:

1. Discover areas for improvement in designing and delivering services, as well as for training and coaching employees.
2. Perceive how well PI is doing in meeting the needs of developers, contractors, and homeowners.
3. Identify the causes of customer dissatisfaction and failed expectations as well as determine the drivers of satisfaction.
4. Track trends to determine whether changes actually result in improvements.

Customer satisfaction measures may include attitude, service time, quality and value, exception handling, accountability, technical support, and the helpfulness and knowledge of employees.

Recommendations:

- 14. Develop and initiate a Customer Satisfaction Program to gather, analyze, and monitor customer satisfaction data.***
- 15. Use the citizen satisfaction rating as one of the performance measures.***

The Inspection Process

Inspection Section

Inspections made during construction is the only way to independently verify that work performed conforms to approved plans and is completed in compliance with the Uniform Statewide Building Code. Inspections verify that construction projects are completed in a manner that ensures citizens' safety. Therefore, it is important to have an appropriate number of well trained inspectors along with a structured quality review program.

Qualifications

The auditor's evaluation indicated that all inspectors hold appropriate commercial and residential certifications as required by law. Therefore, they appeared to have required training and knowledge to perform their duties.

Administrative Tasks

In general, inspections are required at certain points in the construction process and are the responsibility of the permit holder to request. When a permit is issued, an inspector is assigned to that project based on territory and type of permit issued. When an inspection is requested by the permit holder, the request will show up on the inspector's daily (assignment) log sheet on the date requested.

As pointed out above, the inspectors spend a considerable amount of time on administrative and preparation tasks utilizing time needed to conduct inspections. This is estimated to be between one and two hours per day based on the time recorded for the first inspection of the day.

In order to free up inspectors from non-inspection tasks, administrative support would help in increasing number of inspections performed daily.

Recommendation:

16. In order to allow inspectors to spend more time performing field inspections, provide an administrative support person to handle non-inspection tasks.

Once the inspection is completed, the results of the inspection are recorded manually on the inspection ticket and a copy is left at the inspection site. The inspector will enter the results of the inspection into the permit tracking system either that same day or the next business day.

If an inspection is conducted just before a holiday or weekend, the inspection may not be posted in the permit tracking system for three to four days. By waiting to post the results of the inspection, the risk that the inspection will not be recorded increases.

Each inspector has an assigned laptop, a portable printer, and a cell phone. The laptops allow inspectors to access City systems as well as to post the results of inspections to the permit tracking system. Cell phones were assigned to enhance communication with the public and with the office.

The results of the inspection should be entered into the permit tracking system at the completion of the inspection before leaving the site. That way the permit holder can utilize the PI Web Inquiry System to check if the inspection had been completed and get the results of the inspection.

This could possibly eliminate the need for the permit holder to travel to the inspection site to review the inspection ticket, wasting both time and money.

It was noticed during the auditor's ride-along with inspectors that laptops and portable printers are not being used effectively. The inspection tickets are printed out in the office each morning and completed by hand during the inspection. Considering the equipment provided, this is seen to be a waste of effort and productivity. Inspection tickets can be completed at the time of the inspection (utilizing the laptop) and printed out for the permit holder at the end of the inspection – the same time that the inspection results are posted to the permit tracking system.

Recommendations:

- 17. Mandate the use of laptops and printers in the field to complete inspection tickets.***
- 18. Provide additional training on the use of laptops in the field.***
- 19. Require that all inspection results be posted to the permit tracking system at the completion of the inspection before going to the next assignment.***

Other Findings and Observations

Cashiering

PI does not have a traditional cashiering system; however, adequate controls appear to be present to ensure the proper handling of monies. PI processes between \$4,000 and \$100,000 each day. Monies are reconciled and agreed to the permit tracking system activity report the next day and a deposit form is created. Cash and checks, along with credit card transactions, are submitted to the City’s Finance Department cashier section for deposit, processing, and settlement.

Recommendation:

20. With the replacement of the current permit and inspections processing system, consider including a cashiering system.

Permit Fee Adjustments

***PI is not
conducting final
fee audits as
required by City
Ordinance***

According to City Ordinance Section 14-6 entitled Fee Adjustment, “every person to whom a building permit is issued, before final inspection of the work, shall report in writing under oath, by way of cost affidavit, to the commissioner of buildings within 30 days of completion if the final value of the work is either higher or lower than the original estimated cost of the work shown on the permit application. Upon receipt of the cost affidavit from the permit holder, the commissioner of buildings shall adjust such fee and shall refund any excess fee to the permit holder or collect any additional fee as is necessary. If the stated final value exceeds that of R S Means, the stated final value shall be used. If the stated final value is less than R S Means, the R S Means value shall be used.”

Currently, with the exception of an internal policy on projects having a combined (building and trades) value of over \$500,000, PI does not consistently require a final accounting before a final approval is issued.

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Construction Permits and Inspections Division
November 2009

At the time a final inspection is requested by the main contractor, a worksheet listing all the permits issued on the project is printed out and given to the main contractor to add the revised cost. The worksheet is to be returned by the contractor and any additional fees due are paid or overpayments refunded (in cases of cost overstatement). The contractor is not required to certify that the final construction costs are correct as required by ordinance.

Five completed projects were selected for review and compared to the PI permit tracking system. Revised construction costs reported on each worksheet were compared to construction cost indicated on the permit tracking system. The date of the final inspection was compared to the date that all fees were paid to determine if all fees were paid before the final inspection was issued.

The following are the results of the review.

Project	Original Cost	Final Cost	Action
1	\$2,610,615	-	Final construction cost audit worksheet not returned by contractor.
2	\$5,576,878	\$6,416,291	Final inspection issued 2/7/08. For the most part, additional fees paid based on increased value. However, a refund due to a subcontractor was not issued and amount due from another subcontractor was not billed.
3	\$616,619	\$1,013,317	Final inspection conducted on 11/20/08. Final construction cost not reflected in the permit tracking system. Additional fee collected.
4	\$5,072,550	\$8,811,775	Same as above
5	\$801,500	-	Final construction cost audit not conducted.

Audit review determined that no controls exist to ensure that:

- The inspectors consistently notify the inspection manager of a project costing over \$500,000;
- A cost review worksheet is prepared and given to the permit holder to complete;
- The permit holder accurately completes and returns the worksheet;
- The permit tracking system is updated to show audited construction cost; and,
- The final inspection is issued only after all fees have been paid.

Lack of controls and adherence to City Ordinance does result in a loss of fee revenues. How substantial a loss is unknown based on the auditor's limited review of five permitted projects.

Recommendation:

21. Administer and enforce Section 14-6 of the City Code which requires a final accounting of the cost of construction of all permitted projects before a final inspection approval is issued.

Re-inspection Fees

A previously failed inspection requires a re-inspection. The City has established re-inspection fees to cover the relevant costs. Inspectors have discretion to charge the re-inspection fee. Since the re-inspection fee is discretionary and no formal policy exists, there is a chance that fees may not be consistently applied resulting in the City unnecessarily absorbing the expense of re-inspections.

*Inconsistent
assessment of re-
inspection fees
may have resulted
in substantial
financial loss to
the City*

During fiscal year 2008, the permit tracking system reported that approximately 50,645 inspections were closed out by the inspections staff. Of those closed, 16,162 failed inspection thus requiring a least one re-inspection trip. Of the 16,162 unapproved inspections, only 40 commercial and 284 residential re-inspections were closed with a code indicating a fee charge. The permit tracking system is not capable of flagging inspections requiring multiple re-inspections for the same deficiency. A review of the reasons given for non-approval of inspection revealed that approximately 1,900 inspections were unapproved because the property was locked or not accessible. This number could be higher since another 2,800 closed inspections did not specify a reason for non-approval. With an average charge of \$50 per re-inspection, the City could have offset the expense of the re-inspection of the two groupings in the amount of \$235,000 if the re-inspection fees had been charged consistently. In addition, if a fee had been charged for a re-inspection, it is likely the contractor would have ensured access to the inspector the first time, thus improving the inspector's productivity.

Recommendation:

22. Enforce the re-inspection policy and charge the fee in a consistent manner.

***Stop Work
Orders***

Stop work orders are issued when it is found that work on any building or structure is being executed contrary to the provisions of the building code or any pertinent laws or ordinances, or in a manner endangering the general public. The order identifies the nature of the work to be stopped and is given to the owner of the property or to the person performing the work. In addition, City Ordinance Section 14-9 states in

part that any person issued a stop work order shall pay an administrative fee set by City Council.

Stop work orders are issued when work does not comply with regulations or may result in endangering the general public

A stop work order is generally issued by an inspector when he or she comes across a contractor or homeowner performing work without a required permit. The issuance of the order is manually recorded in a book located at the front counter. A “hold” is placed on the property address in the permit tracking system. However, there does not appear to be a follow-up process to ensure that the contractor or homeowner has complied. Without a formal follow-up process, there is a chance that work will continue. Non-compliance with permitting and inspection requirements could result in unsafe property conditions and reduced real estate tax collections on the unassessed improvement.

The process lacks appropriate follow-up to stop orders

Recommendation:

23. Develop and initiate a process to follow-up on stop work orders to include on-site inspections.

Expired Permits

In general, a permit will expire if work on the site authorized by the permit is not commenced within six months after issuance (as evident by lack of requested inspection) of the permit, or if the authorized work on the site is suspended or abandoned for a period of six months. However, permits issued for plumbing, electrical and mechanical work are not revoked if the building permit is still in effect. Upon written request, the building official may grant one or more extensions of time, not to exceed one year per extension.

The expired permit process lacks follow-up

Ten days prior to the expiration of a permit, a notice is sent to the permit holder advising of the expiration of the permit due to lack of activity. If the permit holder does not respond, the permit is placed in

an expired status without follow-up. There is a risk that the permitted project could be completed without the oversight of an inspection, possibly resulting in unsafe conditions and reduced real estate tax collections on the un-assessed improvement.

Recommendation:

24. Develop and implement a process to follow-up on expired permits to include a visual inspection.

***Construction
Plans***

***Construction
plans are not
being handled in a
secure manner as
required by the
USBC***

The Code of Virginia § 36-105.3 (Security of certain records) provides that *building code officials shall institute procedures to ensure the safe storage and secure handling by local officials having access to or in the possession of engineering and construction drawings and plans containing critical structural components, security equipment and systems, ventilation systems, fire protection equipment, mandatory building emergency equipment or systems, elevators, electrical systems, telecommunications equipment and systems, and other utility equipment and systems submitted for the purpose of complying with the Uniform Statewide Building Code or the Statewide Fire Prevention Code.*

It was observed that construction plans are not being handled in a secure manner as required by law. Reviewed plans were shelved or placed in a rack in the public area at the PI front counter and could be retrieved without interaction with the counter personnel. There was nothing to prevent someone from mistakenly, or intentionally, picking up the wrong set of plans. PI has recently discontinued this practice and moved all plans behind the counter area.

While duplicate plans are sent out for recycling, the vendor used is not a secured on-site document shredding service. What is required is an on-site service where the shredding process could be overseen by a P&I employee. Without this oversight, there is no assurance that plans would not fall into the wrong hands.

Recommendation:

25. Utilize a secured on-site document disposal company to dispose of duplicate plans.

MANAGEMENT RESPONSE FORM

COMMUNITY DEVELOPMENT - BUREAU OF PERMITS & INSPECTIONS

#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
1	<i>Conduct a study on how much it actually costs to issue permits and conduct inspections.</i>	Y	<ul style="list-style-type: none"> • Staff to analyze one month's output. • If analysis proves to be too time consuming, this study may require an outside consultant to assist.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		1-Mar-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
2	<i>Adjust fees to provide necessary revenue to offset operational expenses.</i>	Y	<ul style="list-style-type: none"> • Obtain breakdown of all costs -- personnel and equipment -- to issue permits and to inspect. • Present any cost differential to the CAO and prepare fee adjustment.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Dir. Comm Dev/Int Comm of Bldgs		Jul-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
3	<i>Review and update the policy and procedures manual.</i>	Y	<ul style="list-style-type: none"> • Handouts are currently under revision as well as several manuals. • Implement team to develop the individual manuals and hold weekly meetings for review and progress updates.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Eng III/Commercial Plans/Bldg		Handouts -- Jan 2010, Manuals -- March 2010
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
	14 month audit, ICMA reporting, creation of 6 new permits and related programming.		
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
4	<i>Develop and implement a work quality review program for various areas as follows:</i>	Y	(SEE BELOW)
	<p><u>Work Quality Review Recommendation for Permit Intake Review:</u></p> <p><i>(1) Develop a check list to facilitate the review of processed permit applications. (2) Periodically review a sample of permit applications processed by the front counter personnel to ensure completeness and accuracy. (3) Maintain documented results to be utilized as a measure of effectiveness and as an individual performance evaluation tool.</i></p>		(1) - (3) Develop and implement the check list for quality control on permit intake. Each staff member to receive a monthly quality control on two permits. Task assigned to Admin Proj Analyst.

**Work Quality Review Recommendation for
Plan Review:**

(1) Develop a check list to document the review of completed plan reviews. (2) Periodically reexamine a sample of plans approved by plan review personnel to ensure completeness and accuracy of the review. (3) Verify the quality and completeness of at least one set of complex plans for each discipline and reviewer (building and trades) each month. (4) Maintain documented results to be utilized as a measure of effectiveness and as a performance evaluation tool.

(1) Develop and implement the check list for quality control of plan review. Task assigned to EngII/Comm Bldg, Eng II/Plumbing, Electrical Plans Examiner and Mechanical Plan Reviewer. (2) - (4) Review a completed set of plans for each discipline monthly and records findings. Maintain record of findings. Task assigned to Eng.III/Insp, Int. Comm of Bldgs and Mechanical Plan Reviewer.

Fill vacant Eng II/Elect Plan Review position -- as well as the Building Commissioner position. These are key positions to ensure timely and quality Plans Review.

**Work Quality Review Recommendation for
Inspections:**

(1) Develop a check list to formalize the review of completed inspections. (2) Conduct adequate number of appropriate quality reviews of completed residential and commercial projects in a timely manner. (3) Document the review and forward a written report to the inspector's manager for review. (4) Maintain documented results and utilize them as measures of effectiveness during performance evaluations. (5) Require all inspectors to record accurate arrival and site departure times on inspection logs. (6) Capture individual productivity and time data in a form that can be readily used for individual performance evaluation purposes and in establishing inspection benchmarks that can be used for determining staffing needs.

(1) Develop an inspection review checklist for supervisors. Task assigned to EngII/Comm Bldg, Eng II/Plumbing, Electrical Plans Examiner and Mechanical Plan Reviewer. (2) - (5) Senior Inspectors to conduct reviews of completed inspections per the developed checklist with emphasis on daily log of time. Document the review and coordinate with manager as needed. Maintain records of review for use in evaluations and departmental needs. (6) Purchase and implementation of the new land use management system will allow completion of this comment.

Fill the Building Commissioner position, which is now vacant. This is a key position to ensure timely and quality inspections.

TITLE OF RESPONSIBLE PERSON

Int. Comm of Bldgs

IF IN PROGRESS, EXPLAIN ANY DELAYS

TARGET DATE

Permit Intake -- February 2010
Plans Review -- February 2010
Inspections -- February 2010

IF IMPLEMENTED, DETAILS OF IMPLEMENTATION

#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
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5	<i>Develop measures of efficiency and effectiveness in order to provide valuable information on the progress toward achieving the program's mission.</i>	Y	Current software system is unable to provide additional information. Use of Business Objects will be implemented with new land use management system. Purchase and implementation of the new land use management system will allow for the tracking of additional and more specific measures. Procurement to advertise for RFP of new system on November 6, 2009.
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TITLE OF RESPONSIBLE PERSON

Int. Comm of Bldgs/Eng III/Inspections

IF IN PROGRESS, EXPLAIN ANY DELAYS

TARGET DATE

1-Dec-10

IF IMPLEMENTED, DETAILS OF IMPLEMENTATION

#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
6	<i>Modify process to account separately for permits with status changes (active to pending to active) to prevent them from being counted multiple times.</i>	Y	Current software system is unable to provide additional information. Accounting separately for permits will hopefully be implemented with new land use management system -- if it has this capability. Procurement to advertise for RFP of new system on November 6, 2009.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		1-Dec-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
7	<i>Refine performance measures by tracking and reporting building and trades permit issuance times separately.</i>	N	These measures are already broken out and recorded separately by permit type. Sample is attached. We have these broken out now and Richmond Works has not wanted that level of detail. It is available if they ask for it.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
			Information already provided to auditor
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
8	<i>Define the performance measure activities that qualify as "inspection."</i>	Y	Our current software system is not capable of separating various inspection activities, i.e., Inspection passed, Inspection failed, No one on site, etc. This criteria will be developed during the implementation of the new land use management system. Initial review of products available allow for additional coding of inspection results and additional fields for report flagging.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		1-Dec-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
9	<i>Report the "Number of Inspections Conducted" performance measure using the new definition of "inspection."</i>	Y	This criteria will be developed during the implementation of the new land use management system. Inspection results can be coded properly to allow for accurate accounting and tracking of the various types of inspection results.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		1-Dec-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
10	<i>Report the "non-inspection" activities separately.</i>	Y	This criteria will be developed during the implementation of the new land use management system. Inspection results can be coded properly to allow for accurate accounting and tracking of the various types of inspection results.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		1-Dec-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION

#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
11	<i>Research an enterprise permit tracking and inspections system in order to make an educated decision on what system components will be most beneficial to the operations and management of PI and other involved departments and agencies.</i>	Y	Research was conducted by DCD in March - May 2009 -- and an RFP was prepared by DCD and submitted to Procurement in July 2009. System components are listed as critical or non-critical -- and will be incorporated depending on costs. RFP to be issued by Procurement on November 6, 2009. Interviews for system providers should take place in January or February 2010, depending on Procurement process requirements. Additional funding may be required to purchase all the necessary system components that will allow P&I to meet goals.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		1-Feb-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
12	<i>In the new system, provide for the electronic submission, tracking, retrieval, and storage of permit applications, related documentation, and construction plans.</i>	Y	•Additional funding will need to be provided to accomplish all aspects of this comment. The new RFP may produce vendors that provide some of these services. •Purchase of imaging software may conflict with the citywide imaging system currently under the purview of DIT.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		1-Dec-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
13	<i>Obtain relevant, accurate data and monitor productivity and efficiency of activities for all employees using appropriate performance standards and/or benchmarks.</i>	Y	•Management to develop clear procedures for documenting inspections (time and results). •Management to review new procedures with supervisors. •Supervisors to have monthly reviews with inspectors to ensure follow-up.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs/Eng.III/Inspections/Admin Proj Analyst		1-Jun-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
14	<i>Develop and initiate a Customer Satisfaction Program to gather, analyze, and monitor customer satisfaction data.</i>	Y	• Customer service surveys are currently available. • Create a mail back card to send out with permits to solicit feedback. • Create a customer feedback area in our newsletter using one of our departmental mailboxes to receive feedback. • Use email listing from DCD newsletter to send email customer service surveys. • Update and replenish the supplies of current surveys available in office. Issue quarterly surveys that are more detailed than our standard survey.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Admin Proj Analyst		1-Feb-10

IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION	
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
15	<i>Use the citizen satisfaction rating as one of the performance measures.</i>	Y	Collect survey data, summarize and include with monthly report figures.
TITLE OF RESPONSIBLE PERSON		TARGET DATE	
Admin Proj Analyst		1-Feb-10	
IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION	
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
16	<i>In order to allow inspectors to spend more time performing field inspections, provide an administrative support person to handle non-inspection tasks.</i>	Y	<ul style="list-style-type: none"> • Meet with all admin staff to explore options for more inspector assistance. • Determine whether new staff is required. If so, put in new position request. • New Land Use Management System is expected to handle more administrative tasks, such as Daily Inspection Logs. • After implementation of new Land Use Management System, analyze administrative vs. inspection duties for greater efficiency options.
TITLE OF RESPONSIBLE PERSON		TARGET DATE	
Int. Comm of Bldgs/ Admin Proj Analyst		January - Decemeber 2010	
IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION	
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
17	<i>Mandate use of laptops and printers in the field to complete inspections tickets.</i>	Y	<p>The automation coordinator provided portable printers for testing to the inspectors. The following issues were discovered:</p> <ul style="list-style-type: none"> • The paper and printer were adversely affected by the summer heat and humidity in the car and malfunctioned. • Printed tickets faded and were unreadable after several days. • Current system does not provide enough space on the form to include all code information. • Current system does not have standard form templates. • Management team to meet with all inspectors and review pros and cons of portable computers, explore options for improvement. • Improvements may require new Land Management Tracking System.
TITLE OF RESPONSIBLE PERSON		TARGET DATE	
Int. Comm of Bldgs, Eng.III/Inspections		January - December 2010	
IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION	
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
18	<i>Provide additional training on the use of laptops in the field.</i>	Y	Management to meet with all inspectors, review pros and cons of current equipment, and explore solution options.
TITLE OF RESPONSIBLE PERSON		TARGET DATE	
Int. Comm of Bldgs, Eng.III/Inspections		1-Jan-10	
IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION	

#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
19	<i>Require that all inspection results be posted to the permit tracking system at the completion of the inspection before going to the next assignment.</i>	Y	Issue a policy memo with this requirement after the training issues have been completed and laptops can maintain connection.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs, Eng III/Inspections		1-Nov-09
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
20	<i>With the replacement of the current permit and inspections processing system, consider including a cashiering system.</i>	Y	Two options: 1) Use the current cashiering packaged used by Finance (Tyler) and train staff. Once the batch is reconciled, Finance would handle the remaining settlement and processing. 2) Purchase a cashiering module with the new land use management system that interfaces with Tyler cashiering.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		January - December 2010
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
21	<i>Administer and enforce Section 14-6 of the City Code which requires a final accounting of the cost of construction of all permitted projects before a final inspection approval is issued.</i>	Y	<ul style="list-style-type: none"> • Revise current ordinance for clarification and inclusion of audit process. • Issue policy memo after ordinance adoption. • Ensure new land use management system can flag properties identified for audit under the ordinance and provide necessary data in spreadsheet form to use in audit. • Continue current manual process until new system implementation and ordinance changes.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Eng. III/Inspections		Summer 2010
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
22	<i>Enforce the re-inspection policy and charge the fee in a consistent manner.</i>	Y	Ordinance revision to be developed and submitted to define "reinspection" and determine the event which would lead to assessing a reinspection fee.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Eng. III/Inspections		Summer 2010
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
23	<i>Develop and initiate a process to follow-up on stop work orders to include on-site inspections.</i>	Y	New system to remind inspection to follow-up because the current system cannot track stop work orders.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Eng. III/Inspections		Dec-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION

#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
24	<i>Develop and implement a process to follow-up on expired permits to include a visual inspection.</i>	Y	<ul style="list-style-type: none"> We currently notify owner by mail when a permit is expired. New Land Management Tracking System to alert inspectors of expired permits. <p>There are not enough current inspectors to handle the high volume of expired permits.</p>
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Eng. III/Inspections		Dec-10
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
#	RECOMMENDATION	CONCUR Y-N	ACTION STEPS
25	<i>Utilize a secured on-site document disposal company to dispose of duplicate plans.</i>	N	<ul style="list-style-type: none"> Plans are public records and do not contain any private information that requires shredding. The plans do not carry approval stamps and all plans are subject to the Freedom of Information Act, unless a letter requesting exemption is granted by the law department. Plans are currently recycled in the DPW program. We joined this process to promote recycling and reduce the impact and labor needs for the housecleaning staff. DCD has requested a formal opinion from the State to ensure that our procedures are compliant with state code, which we believe they are. However we are requesting funding to contract out the shredding of all plans and related documents.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Int. Comm of Bldgs		
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION