



## CITY OF VANCOUVER

### ADMINISTRATIVE REPORT

Date: April 8, 2005  
Authors: David Desrochers/  
Tom Hammel  
Phone No.: 7893/7370  
RTS No.: 05079  
CC File No.: 1375  
Meeting Date: May 10, 2005

TO: City Council  
FROM: General Manager of Engineering Services  
SUBJECT: Engineering - Streets Design and Administration Branch Reorganizations

#### RECOMMENDATIONS

- A. THAT Council approve reorganizations of the Streets Design and Streets Administration branches as detailed in this report, at a net annual cost of \$31,500 in 2005 (\$67,700 ongoing) to be funded through savings in the Graffiti Management Program as recommended in the accompanying report "Review of Graffiti Management Program" - RTS 03560 and approve the following staff requests:

##### Streets Design Branch

- i. The creation of a Civil Engineer I (Regular Full Time, RFT) and three Engineering Assistant III (RFT) positions subject to classification review by the Director of Human Resources;
- ii. The conversion of a Civil Engineer I to a Civil Engineer II and an Engineering Assistant III to a Business Systems Administrator;
- iii. The elimination of two Survey Assistant II positions (Temporary Full Time {TFT}); and an Engineering Assistant IV (RFT) position;

Streets Administration Branch:

- iv. The creation of a Civil Engineer I (RFT), a Clerk III (RFT) and an Engineering Assistant II (RPT - half-time) position subject to classification review by the Director of Human Resources;
  - v. The conversion of one TFT Engineering Assistant II position to Regular Full-Time; and,
  - vi. The allocation of \$23,000 from the Truck & Equipment Replacement Reserve (Plant Account) to add one station wagon to the vehicle fleet.
- B. THAT Council approve the expenditure of \$50,000 for the upgrade of Survey Equipment, previously planned for 2007 funded through savings in the Graffiti Management Program as recommended in the accompanying report "Review of Graffiti Management Program" - RTS 03560.

### COUNCIL POLICY

All regular full time staff additions and deletions are to be approved by Council.

Council approves expenditures from Reserves, including the Truck Plant Account and all increases in service levels, including the addition of equipment to the fleet.

### SUMMARY

The proposed reorganizations of the Streets Design and Administration Branches will result in several positions being created, converted and eliminated, as well as some equipment being purchased. The proposed changes will improve customer service and will result in some cost savings. No layoffs or reduction of existing staff result from this report.

The benefits of the proposed changes allow for the areas of these branches in high demand, to be staffed appropriately, while shifting staff resources from areas or programs of lower demand, or where technology advancements have been made. Furthermore, the proposed changes provide staff the stability required to allow them to adapt to the challenges of an ever changing workplace.

### PURPOSE

The purpose of this report is to obtain City Council approval to reorganize both the Street Design and Street Administration branches.

### BACKGROUND

The Streets Design and Streets Administration Branches in Engineering Services provide services related to the design, construction and management of streets and sidewalks in the City.

In early 2004, Council approved a reorganization to the management structure of the Streets Operations Branch. Most of the reorganization is now successfully completed, with the new managers adjusting to their new roles. The Street Operations branch, and in particular, these new managers, work closely with the Streets Design branch to ensure the effective delivery of both the Streets Capital and the Streets Operating (Maintenance) Program.

## DISCUSSION

Organizational changes to the Streets Design and Administration Branches are proposed in response to: changes to branch priorities and focus; growth or reduction in areas of branch responsibilities; desire for more consistent and stable organization structure within the Engineering Department; and, technology advancements in engineering. The general aim of the proposed reorganizations is to formally realign staff resources to areas of increased demand, such that both these branches can operate more effectively.

The next two sections of this report review staffing and resource levels in the Streets Design Branch and Streets Administration Branch.

### 1. Streets Design Branch

The Streets Design Branch is responsible for the planning, design and coordination of \$20 million of City road and sidewalk capital work annually and for managing the Local Improvement Process. The branch provides overall coordination of streets, sewer and water capital construction projects for Engineering Services to improve construction efficiencies and minimize disruption to the public of this work. Streets Design has also taken a leadership role in designing and implementing innovative projects such as the Country Lane project and the construction of Crown Street - Vancouver's First Sustainable Street and Fish Enhancement project. Streets Design has generally consisted of 35 to 40 staff and has seen little formal change to its organizational structure since 1997. Over the last few years the branch's priorities and focus have changed, including significant technological advancement in the survey area.

In 2003, IBM Business Consulting Services completed the Construction Methodology Review report for Engineering Services. That report supports a Project Manager model for the delivery of all Engineering Services projects. The transition to this type of model, where a Project Manager is responsible for all aspects of the design, coordination and construction for most infrastructure projects, has been successfully taking place over the last few years. This was accomplished on a trial basis without any formal changes to the branch's organization by temporarily allocating staff from the survey area to the expanding project management section of the branch and by utilizing engineering students. This temporary arrangement has proven successful, as these Project Managers have become more responsible and accountable for all aspects of their projects. These Project Managers work closely with newly appointed Operations Superintendents and this has resulted in better delivery of streets work.

In a May 15, 1997, report, Council approved Improvements to the Streets survey and design process. These changes converted a manual process to digital, and have proven most successful. One of the recommendations of this report was to periodically upgrade the new survey equipment in order to ensure that it is kept current. In 2004, a review of this program

confirmed its success and identified further efficiencies that could be achieved by advancing equipment upgrades.

Now with the Streets Operations Branch reorganization nearly complete, it is appropriate to formalize the Project Management staff resources and provide some stability in the Streets Design Branch.

#### a) Project Management Staffing

The regular Project Management staff resources being requested would ensure that the improved project delivery process continues. These proposed positions are shaded in Appendix A - Streets Design Branch Proposed Organization, and are as follows:

- Senior Project Manager - Civil Engineer I (RFT)
- Three Junior Project Managers - Engineering Assistants III's (RFT)

The Senior Project Manager would be responsible for the delivery of some of the more complex and larger Streets projects, such as the street work associated with RAV, and would lead the delivery of our innovative and sustainable projects. It is clear that the sustainability aspect of streets and lanes is in its infancy and that the City of Vancouver is a leader in this area. In order that we continue this worthwhile endeavour, we propose to have a new Civil Engineer I assigned to this rapidly expanding area of work. The three Junior Project Managers would work closely with Senior Project Managers and would manage the numerous smaller and less complex engineering projects, such as the sidewalk projects required to complete our sidewalk network.

#### b) Long Range Planning Staffing

Streets needs to develop and carry out a long range planning strategy to better target the \$35 million annual maintenance and capital funding. This will involve setting up systems to track infrastructure performance, monitoring that data and planning annual capital replacement projects and maintenance priorities that maximize the efficiencies of overall maintenance and capital expenditures. In an effort to address this need, we propose the conversion of the following two positions, shaded in Appendix A:

- Civil Engineering I (RFT) to a Civil Engineer II (RFT)
- Engineering Assistant III (RFT) to a Business Systems Administrator (RFT)

The existing Civil Engineer I incumbent is retiring later this year. This position would be replaced with a Civil Engineer II, responsible for managing Streets' Long Range Planning process. A recent survey of Vancouver's \$1 billion worth of streets and lanes indicates there is \$100 million of street work to be done to maintain this asset. This position will address this issue as well as play a key role for Streets, with input into Engineering's current development of its Infrastructure Management Strategy. The proposed Business Systems Administrator would work closely with the Long Range Planner to ensure that all budgets and accounts were structured such that they result in an increased level of responsibility and accountability for the delivery of engineering work.

### c) Survey Staffing

For the past year, the Streets Surveyors have been successfully using two new "Total Stations" that have auto-tracking and robotic capability. This capability allows for some survey work to be completed by a one person crew, rather than a two person crew. Furthermore, a study completed in the summer of 2004, comparing City versus private survey crews, indicated that City survey forces are good value with their costs being about half the charge out rates of the private survey crews. This study also recommended that the remaining Street's Survey Instruments be upgraded to take advantage of the efficiencies of the auto-tracking and robotic capability.

This proposed upgrading was previously scheduled for 2007 in the May 1997 report, entitled Improvements to the Streets Survey and Design Process. This report recommends the upgrading of the equipment this year instead, at an estimated cost of \$50,000. The efficiencies gained by upgrading the survey equipment and the addition of the three junior project managers will allow for the elimination of the following staff positions, as shaded in Appendix A:

- Two Survey Assistant II positions (TFT)
- Engineering Assistant IV (RFT)

No layoffs will result as the three positions are currently unfilled.

## 2. Streets Administration Branch

The Streets Administration Branch provides services related to management of various uses of sidewalk space including street furniture, private property encroachments, commercial use of sidewalk space (eg-sidewalk patios, street vending and newsboxes) and enforcement of illegal vending and signing. Over the past few years, there has been significant growth in activities on sidewalk space, particularly with commercial uses, introduction of new street furniture, and illegal vending and sign placement.

The management of sidewalk space is becoming increasingly important given the growth in uses of that space, and Council's policy shift toward prioritising pedestrians. In support of this, Council established the Sidewalk Task Force which submitted the report 'Vancouver - A Walking City' addressing sidewalk safety, access and ambiance. The Sidewalk Task Force recognized the diversity of uses of sidewalk space in the City and the need to balance these uses to create a safe, accessible and interesting space for pedestrians. The Streets Administration branch will be responsible for implementing many of the recommendations of the Sidewalk Task Force that were considered by Council on November 18, 2004.

The branch also enforces the vending by-law and signing infractions. Illegal vending activities and signing infractions have accounted for a growing portion (currently about 75%) of enforcement investigations carried out by Engineering staff (see Figure 2).

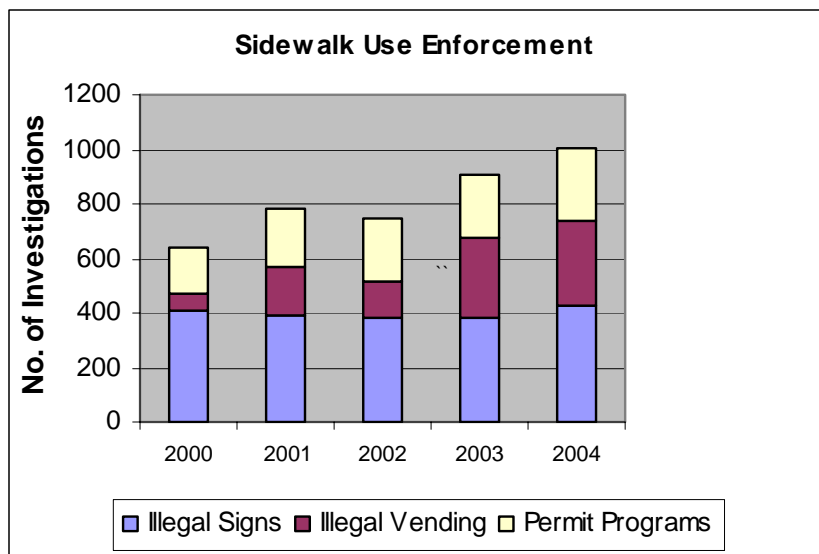


Figure 2 - Sidewalk Use Enforcement

There has been significant growth in the amount of illegal vending that takes place in areas where a number of illegal vendors come together and in complaints from the public about this activity. Staff regularly impound goods from illegal vendors and hold them in a compound for at least 30 days to claim their goods on payment of impounding fees. This activity peaks in the summer. Effectiveness of this enforcement is limited by current resource levels and Police availability and is only a short-term deterrent due to the persistence of illegal vendors. Enforcement is largely complaint driven and there is little time for proactive enforcement or education initiatives about the importance of keeping the pedestrian corridor on sidewalks clear.

Between 1998 and 2004, there has been a 50% increase in the number of businesses using sidewalk space for commercial sales (sidewalk patios, produce display and street vending) and a real growth in revenues of over \$200,000 after inflation (see Figure 3). Current revenues of \$650,000 more than offset related staffing and program costs of about \$290,000 per year. Growth of the popular sidewalk patio program continues at a high rate particularly since the smoking bylaws have come into effect. This growth has increased workload for administrative staff impacting timely approval of new applications, timely response to public complaints about the various uses, and identification of unauthorized commercial encroachments into public space. In addition, the recent increase in the number of newsboxes has increased workload related to approvals of new locations and enforcement.

In 2000, Council approved a temporary exempt staff position to research and implement the street furniture program. This temporary position ended in 2004. In July, 2002, Council approved the creation of a regular full-time Engineering Assistant which was filled in the spring of 2003 to help coordinate the placement of street furniture and inspect the level of service and maintenance required from the street furniture contractor. Implementation of the street furniture program is progressing well with the roll out of bus shelters, benches, and litter containers. Further components of the program to be implemented include wayfinding signage and public toilets.

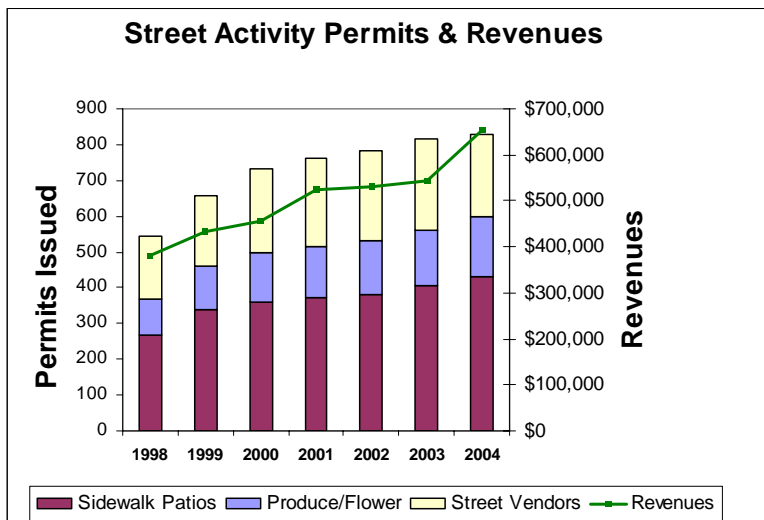


Figure 3 - Street Activity Permits & Revenues

Staffing levels related to illegal and permitted uses of sidewalk space were last reviewed by Council in 1997. At that time, one full-time and one half-time (seasonal) positions were approved to provide enforcement of street vending issues. In 2003, Council approved a further half-time position to enforce the removal of graffiti removal on garbage containers, resulting in one regular full-time and one temporary full-time enforcement positions. Programming staff levels were last reviewed in 1989. The proposed changes to the branch organization structure are identified in Appendix B.

It is recommended that the following resources be approved to deal with the growth in uses of sidewalk space and enforcement of non-permitted uses:

- Engineering Assistant II (half-time)
- Clerk III
- Vehicle
- Conversion of one TFT Engineering Assist. II enforcement position to regular full-time
- Education/outreach budget

These resources would support enforcement of illegal vending and monitoring of sidewalk uses by businesses. The clerk would take on administrative functions related to fee payment and records management, allowing program staff to spend more time in the field carrying out enforcement and education. The half-time Engineering Assistant II would be hired for 6 months in the summer when illegal vending activity is highest and would provide support for Police in the impoundment of goods and identification of problem areas.

It is also proposed to create a Civil Engineer I position to provide overall management and implementation of the street furniture program, and oversee policy development and public education on sidewalk management. This would include implementation of outstanding recommendations of the Sidewalk Task Force.

Resources to deal with management of the newsbox program will be reported back separately as part of a policy review in this program. If additional ongoing resources are required, they can be funded through newsbox fees.

Benefits of the additional resources would be as follows:

- A safer and enhanced pedestrian environment through a reduction in illegal vending and signing, and a reduction in the number and degree of encroachments into public space
- Greater efforts toward public education and awareness of the various sidewalk issues and activities
- Greater face to face opportunities with business owners aiding in the development of a cooperative and community minded approach to pedestrian safety
- Additional revenues from permit fees for businesses not currently paying for commercial uses of sidewalk space (sidewalk patios and merchandise) and from enforcement revenues (impound fees).

These resources could also absorb some future growth in programs and the introduction of a permit program covering all merchandise on City streets. Currently, only businesses with produce and flowers are permitted to display their wares on City streets. However, other businesses also display merchandise without permits creating an enforcement issue and more clutter on the sidewalks. The General Manager will be reporting back to Council on establishing a merchandise permitting program in 2005.

Increased revenues projected in the various vending programs (sidewalk patios and produce displays) will fund the majority of the cost of the new resources.

## FINANCIAL IMPLICATIONS

The new resources being recommended in this report can be funded mostly through a combination of revenue increases and existing funding. A portion of the proposed reduction in the Graffiti Management Program budget as outlined in the accompanying report "Review of Graffiti Management Program" RTS #03560 is also required (\$31,500 in 2005 and \$67,700 ongoing). As summarized in Table 1 below and shown in more detail in Appendices C and D, this results in a net Operating Budget saving of \$155,500 in 2005. Of this savings, revenue increases of \$80,000 have already been approved in the 2005 Final Operating Budget. Ongoing annual savings of \$114,700 will be possible in 2006 and subsequent years.



Table 1 - Summary of 2005 and ongoing Operating Budget impacts

	Streets Design	Streets Administration		Total 2005	Total Ongoing
		Graffiti Program	Other		
Expenditure Increase	\$ 267,400	\$123,200	\$138,100	\$528,700	\$783,000
Cost Reduction	(\$ 226,800)	(\$310,200)	(\$28,300)	(\$565,300)	(\$696,900)
Allocation to Capital	(\$19,900)			(\$19,900)	(\$50,800)
Revenue Increase			(\$99,000)	(\$99,000)	(\$150,000)
Totals-2005	\$20,700	(\$187,000)	\$10,800	(\$155,500)	-
Totals - Ongoing	\$52,900	(\$182,400)	\$14,800	-	(\$114,700)

## PERSONNEL IMPLICATIONS

### 1. Streets Design Branch

The proposed reorganization of the Streets Design Branch will result in the creation of the following positions:

- Three Engineering Assistant III's (RFT)
- Civil Engineer I (RFT)

The following positions would be converted:

- Civil Engineering I (RFT) to a Civil Engineer II (RFT)
- Engineering Assistant III (RFT) to a Business Systems Administrator (RFT)

The following positions would be eliminated:

- Two Survey Assistant II positions (TFT)
- Engineering Assistant IV (RFT)

### 2. Streets Administration Branch

The reorganization of the Streets Administration will result in the creation of the following positions (subject to classification):

- Civil Engineer I
- Engineering Assistant II (RPT - ½ time)
- Clerk III

The following temporary positions would be converted to Regular Full-time:

- 2 (two) Engineering Assistant II half-time positions (graffiti on garbage containers and Street Activity Enforcement)

There would be no layoffs as a result of any of the above proposed changes. The Engineering positions proposed to be eliminated in both branches are currently being held vacant. The new positions would be subject to classification reviews.

CUPE15 have been informed of the proposed changes and a copy of this report has been provided to them.

## CONCLUSION

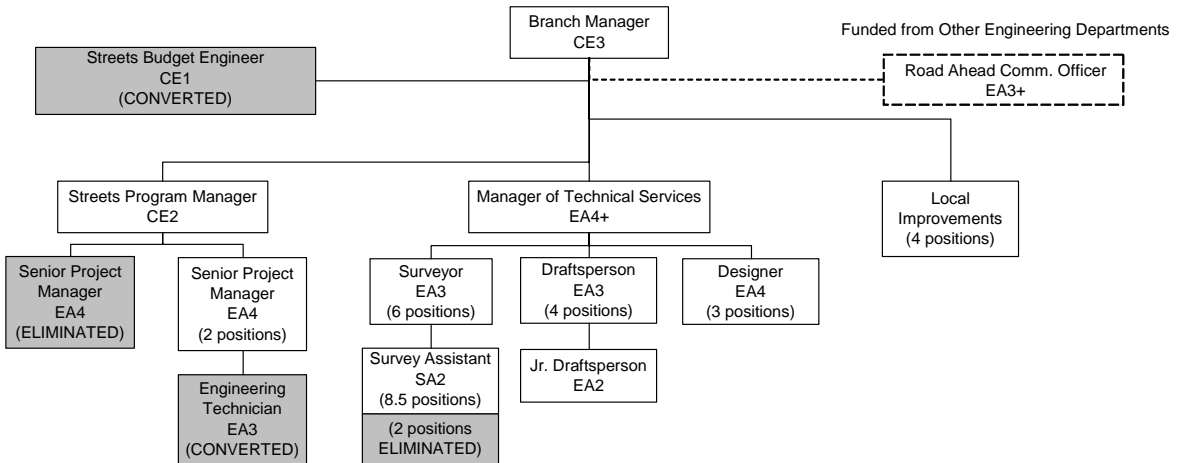
This report proposes changes to the Streets Design and Administration Branches organizations that address emerging areas of increased demand. It is critical that the proposed reorganizations take place in order to provide staff the stability required to meet the challenges of an ever changing workplace. These changes will result in improved customer service, better value to the taxpayer and some cost savings, helping to ensure the future success of Engineering Services.

\* \* \* \* \*

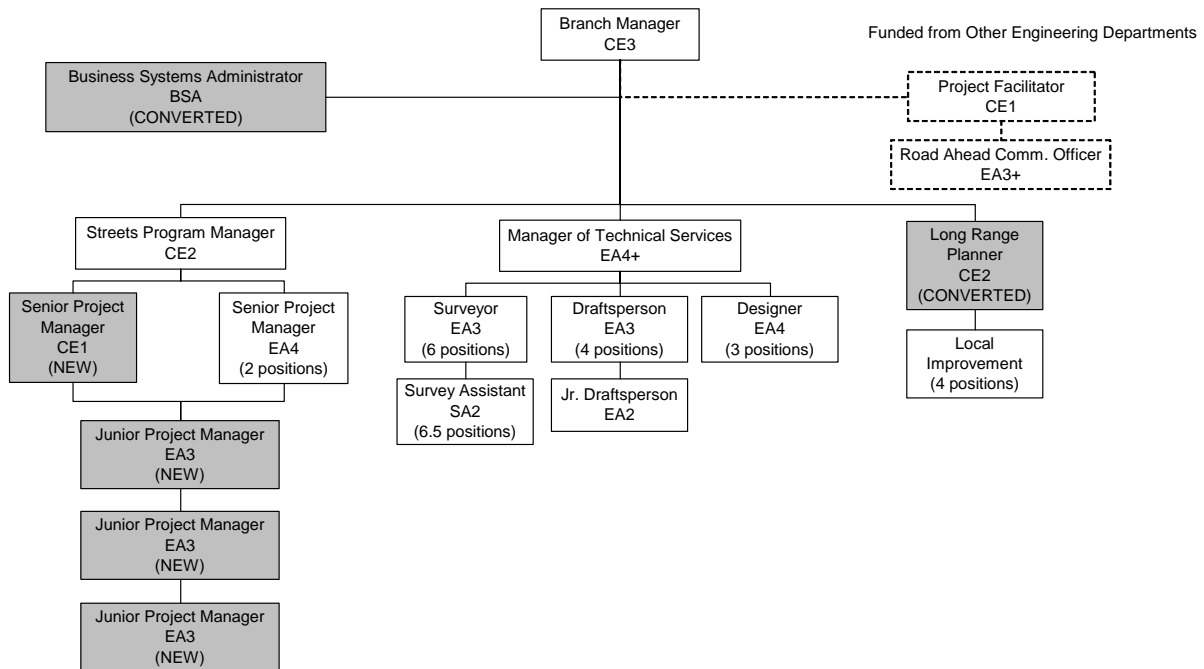
APPENDIX A

Streets Design Branch Proposed Organization

Pre 2004 Streets Design Branch Organization Structure

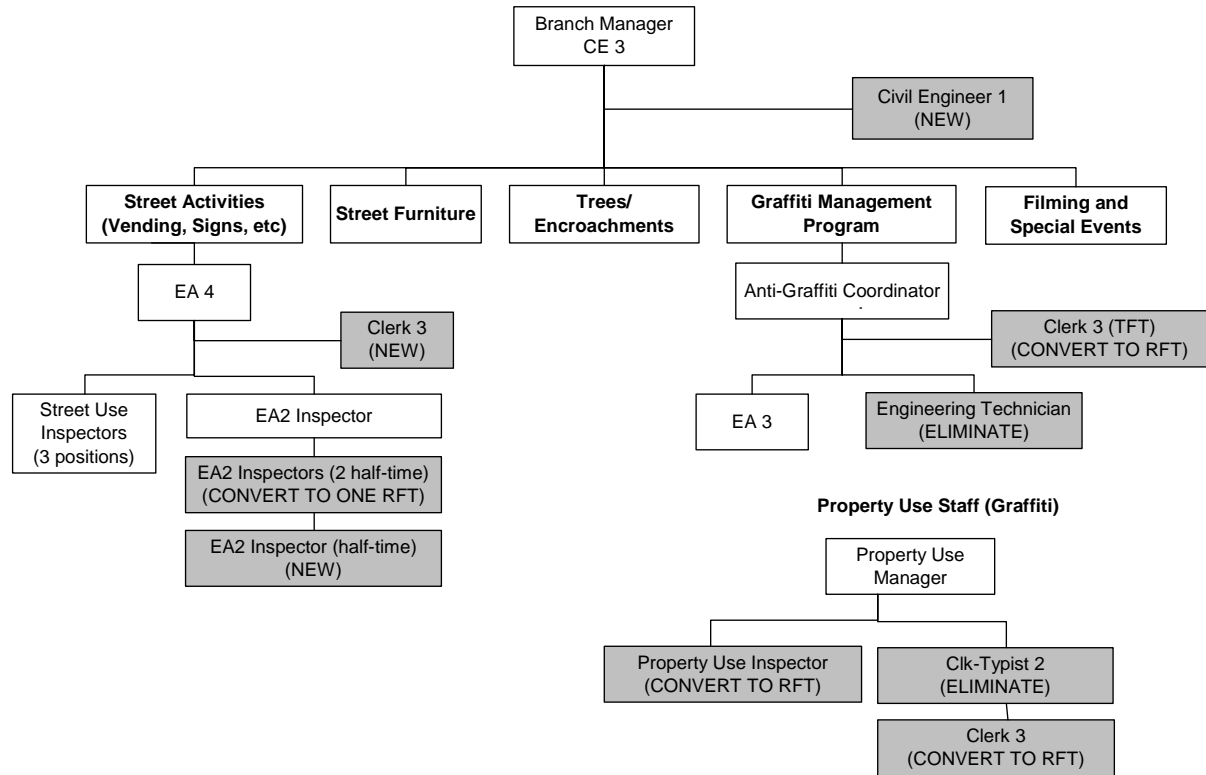


Proposed Streets Design Branch Organization Structure



APPENDIX B

Streets Administration Branch Proposed Organization



APPENDIX C

Budget Impact of Streets Design

		2005 Budget Impact (8months)	Ongoing Budget Impact
<b>A. Budget Increases</b>			
1. Administration			
	Business Systems Administrator	\$48,700	\$73,100
2. Project Management			
	Civil Eng I Sr. Project Manager	\$52,000	\$78,000
	EA-III Jr. Project Manager	\$36,500	\$54,700
	EA-III Jr. Project Manager	\$36,500	\$54,700
	EA-III Jr. Project Manager	\$36,500	\$54,700
3. Long Range Plan/Local Improvement			
	Civil Eng II LRP Engineer	\$57,200	\$85,800
	<b>Total Budget Increases</b>	<b>\$267,400</b>	<b>\$401,000</b>
<b>B. Cost Reductions</b>			
1. Administration			
	Civil Eng 1	\$57,800	\$86,700
	EA-III	36,500	\$54,700
2. Project Management			
	EA-IV	\$46,700	\$70,100
3. Technical Services			
	Survey Assistant-2	\$42,900	\$42,900
	Survey Assistant-2	\$42,900	\$42,900
	<b>Total Cost Reductions</b>	<b>\$226,800</b>	<b>\$297,300</b>
	<b>Increase (Gross)</b>	<b>\$40,700</b>	<b>\$103,700</b>
	Allocated to Capital (49% of gross increase)	(19,900)	(\$50,800)
	<b>Net Operating Budget Impact</b>	<b>\$20,700</b>	<b>\$52,900</b>

APPENDIX D

Budget Impact of Streets Administration Reorganization

A. Budget Increases			
		2005 Budget Impact (8months)	Ongoing Budget Impact
1. Overall Sidewalk Management			
	Civil Eng. I (RFT)	\$ 52,000	\$ 78,000
2. Street Activities			
	Eng. Assistant II (RFT)	\$ 31,000	\$ 46,500
	Eng. Assistant II (RPT - ½ time)	\$ 15,500	\$ 23,200
	Clerk III (RFT)	\$ 31,000	\$ 46,500
	Vehicle	\$ 5,300	\$ 8,000
	Promotion/Education	\$ 3,300	\$ 5,000
3. Graffiti Management Program *			
	Clerk III (RFT) (Eng.)	\$31,000	\$46,500
	Clerk III (RFT) (Comm. Svcs.)	\$31,000	\$46,500
	Property Use Inspector	\$41,200	\$61,800
	Mural Program (Funding increase)	\$20,000	\$20,000
Net Operating Budget Funding		\$ 261,300	\$ 382,000

B. Cost Reductions/Revenue Increases			
1. Street Activities Budget			
	EA II (TFT)	\$ 28,300	\$ 42,400
2. Revenues			
	Impound Fees	\$ 4,000	\$ 5,000
	Identification of occupancies not currently paying fees	\$ 15,000	\$ 20,000
	Merchandise Program (subject to Council approval)	\$0	\$ 25,000
	Sidewalk Patios	\$ 80,000	\$ 100,000
3. Graffiti Budget *			
	Engineering Technician (Eng.)	\$ 49,900	\$ 49,900
	Clerk-Typist II (Comm. Svcs.)	\$ 36,100	\$ 36,100
	Clerk III (TFT) (Eng.)	\$28,300	\$42,400
	Clerk III (TFT) (Comm. Svcs.)	\$28,300	\$42,400
	Property Use Inspector	\$37,600	\$56,400
	Free Paint	\$ 60,000	\$ 60,000
	Removal From Heritage Buildings	\$ 30,000	\$ 30,000
	Education/Outreach	\$ 40,000	\$ 40,000
Total Reductions/Revenue Increases		\$ 437,500	\$ 549,600
Net Budget Reduction		\$ 176,200	\$ 167,600

\* Graffiti Program budget changes recommended in RTS 03560 "Review of Graffiti Management Program" repeated here for completeness