

ENGINEERING

Mission Statement

To reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street use.

Description of Operations

The Engineering Department/City Engineer is responsible for regulating everything that is located within the City right-of-way. A right-of-way is a strip of land acquired by reservation, dedication or condemnation. The right-of-way is intended for public uses such as roads, utilities (both public and private), clear zones for traffic safety, sidewalks, bicycle lanes and trails, drainage facilities, lighting, signage and access between property and the roadway system.

The Engineering Department is comprised of four individual "cost center" teams: Administration, Transportation, Construction and Design.

The Administration Team provides leadership, direction and support to all Engineering Department activities through switchboard and reception, clerical assistance, record management, human resources related activities, visual display materials, coordination of meetings and dissemination of information related to projects and services, processing of all departmental expenditures, preparation and maintenance of the Engineering Department budget, and preparation of City Commission agenda related materials. This team is also responsible for the maintenance and processing of all paperwork necessary to collect revenues from various local, state and federal agencies for construction projects and/or interlocal agreements, as well as applying for grants and disaster assistance, along with analysis of operating and capital projects, and the processing of all related expenditures.

The Transportation Team plans and develops projects prior to being incorporated into the City Capital Improvement Program (CIP), a program which is developed through the City's Finance Department and approved by the City Commission that includes all City projects that are scheduled for construction in the next 10 years. The Transportation team also measures the impact of proposed developments throughout the City by reviewing and determining if a project is de minimus or if a traffic study is required. Review of transportation concurrency and traffic circulation reports for compliance with the applicable criteria of the City Code; design of City infrastructure related to transportation improvements on roadways; implement, operate and maintain the City's computerized multi-arterial traffic signal system; maintain and operate the City's traffic count program; and investigate the feasibility of installing traffic signs and pavement markings so the general public has a safe, efficient flow, and convenient transportation system on City maintained roadways are functions of this team.

Traffic Calming is a part of the Transportation Team and is defined as the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street use. There is a process established for the "Traffic Calming Program" and as a result of that process a traffic calming plan may be approved and subsequently the project will be designed, bid and constructed.

The Construction/Inspection Team is responsible for permitting (utilities, sidewalk cafes, valet parking, encroachments, driveways, right-of-way use and newsracks), inspection, planning, design and monitoring of the various uses of the right-of-way.

This team also provides full time construction inspection during Engineering Department initiated construction projects and for other departments when necessary. This includes coordination with the public, other City departments and utilities during the construction project, evaluation of pay requests, field directives, and change orders when necessary and final project acceptance.

The Planning and Design Team provides well planned, City Code compliant infrastructure improvement projects through timely and concise design (accomplished internally or externally) and development plan review (public and private development projects) for code compliance. To help facilitate the project design, the Engineering Department has developed and maintained the Engineering Design Criteria Manual (EDCM) for use on all design projects, both public and private, within the City Limits. This team includes the design of projects with in-house staff, as well as the selection process to hire engineering consultants, perform contract negotiations and management of the consultant through the design process.

ENGINEERING

Department Expenditures by Cost Center

	FY 2001 Actual	FY 2002 Budget	FY 2003 Continuation	FY 2003 Issues	FY 2003 Totals
028621 ADMINISTRATION	205,329	177,582	181,188	24,117	205,305
028622 TRANSPORTATION	306,300	262,920	277,819	31,022	308,841
028623 CONSTRUCTION INSPECTION/ADMINIS'	175,351	264,093	254,374	13,530	267,904
028624 DESIGN	211,335	262,258	309,831	11,838	321,669
Totals	\$898,315	\$966,853	\$1,023,212	\$80,507	\$1,103,719

Department Expenditures By Category

	FY 2001 Actual	FY 2002 Budget	FY 2003 Continuation	FY 2003 Issues	FY 2003 Totals
Personal Expenditures	819,471	868,143	927,068	71,957	999,025
Non Personal Expenditures	73,281	97,610	89,044	4,300	93,344
Capital Expenditures	5,563	1,100	7,100	4,250	11,350
Totals	\$898,315	\$966,853	\$1,023,212	\$80,507	\$1,103,719

Personnel Summary

Actual Positions	17.00	17.00	2.00	19.00
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Revenue Summary

	Total
LICENSES & PERMITS	83,500
INTERGOVERNMENTAL	62,392
CHARGES FOR SERVICES	5,000
OTHER MISCELLANEOUS REVENUES	2,000
INTRAGOVERNMENTAL SERVICES	140,000
	\$292,892

ENGINEERING ADMINISTRATION

Mission Statement

To ensure public safety by providing high quality engineering services through traffic control, transportation and right-of-way management, compliance of design and construction standards, and customer service assistance.

Description of Operations

The Administration Team "cost center" provides leadership, direction and support to all Engineering Department activities.

This Team is responsible for the preparation and maintenance of the Engineering Department budget, preparation of purchase orders, expenditure vouchers and travel arrangements, along with analysis of operating and capital projects, and the processing of all related expenditures.

This Team is also responsible for preparing all City Commission Agenda related items, and ensuring that the item meets agenda guidelines.

This Team prepares the project specification manual and plans for projects that will be sent out for bid; as well as conducts, schedules, and transcribes minutes of the pre-bid and pre-construction meetings. The Administration Team works closely with the Purchasing Department in ensuring that all bond requirements are met and proper paperwork has been received by contractors prior to them being issued a Notice to Proceed to commence work.

This Team manages all incoming and outgoing correspondence, as well as management of the departmental filing system.

This Team also provides support through switchboard and reception, visual display materials, coordination of meetings and dissemination of information related to projects and services.

This Team is responsible for maintenance and the processing of the necessary paperwork required in order to collect revenues from various local, state and federal agencies for construction projects and/or any agreements the City has entered into.

All Engineering Department employee related activities are maintained by this Team. These activities consist of preparing and processing of employee evaluations, recruitment and disciplinary actions, payroll and other human resources related actions.

Goal - Responsible City Government

To monitor and maintain the department budget and to provide quality customer service.

Objectives

To provide efficient fiscal oversight and analysis of operating and capital projects, and processing of related expenditures on a weekly basis.

To accomplish customer satisfaction by providing "quality customer service" in responding to customers concerns/requests within one (1) week of original request .

To prepare and monitor reimbursement requests to Sarasota County, Florida Department of Transportation and Florida Department of Environmental Protection, per their individual project agreements, and follow-up the reimbursement request every thirty (30) days until payment is received.

Performance Measures

<u>Description</u>	<u>Unit</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
Output Measure					
PO's/EV's and invoices processed	Number	n/a	n/a	700	735
Incoming/outgoing correspondence proc'd	Number	n/a	n/a	15,500	16,275
Telephone calls/walk-in traffic	Number	n/a	n/a	6,200	6,510

ENGINEERING ADMINISTRATION

Output Measure

Grant reimbursement requests processed	Number	n/a	n/a	7	8
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Effectiveness Measure

PO/EV/invoices processed within 1 wk.	Percent	n/a	n/a	90	92
Customer request response time in 1 wk.	Percent	n/a	n/a	90	92
Grant reimb. request received in 90 days	Percent	n/a	n/a	75	80

Efficiency Measure

Cost per PO/EV/Invoice	Dollars	n/a	n/a	\$1.78	\$1.76
Cost per correspondence	Dollars	n/a	n/a	\$1.87	\$1.84
Cost per customer service	Dollars	n/a	n/a	\$0.23	\$0.22
Cost per \$100,000 Grant reimbursement	Dollars	n/a	n/a	\$465.43	\$481.71

Expenditures By Category

	FY 2001 Actual	FY 2002 Budget	FY 2003 Continuation	FY 2003 Issues	FY 2003 Totals
Personal Expenditures	140,370	119,967	129,648	19,067	148,715
Non Personal Expenditures	60,544	57,615	51,540	800	52,340
Capital Expenditures	4,415	0	0	4,250	4,250
Totals	\$205,329	\$177,582	\$181,188	\$24,117	\$205,305

Personnel Summary

Actual Positions		2.00	2.00	0.50	2.50
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ENGINEERING TRANSPORTATION

Mission Statement

To sustain the City's natural, aesthetic, social and economic resources compliant with the City's goal "To be an Attractive, Clean and Aesthetically Pleasing City". Transportation Program ensures that no development approvals are issued that would degrade the Level of Service (LOS) conditions on roads to below adopted standards, and to minimize traffic intrusion on our neighborhood streets.

Description of Operations

The Transportation Team plans and develops transportation related projects prior to being incorporated into the Capital Improvement Program (CIP), a program which is packaged by the City's Finance Department and approved by the City Commission that includes all City projects that are either funded or scheduled for construction in the next 10 years.

In addition, this Team measures the impact of developments throughout the City by reviewing and determining if a project is de minimis or if a traffic study is required; reviewing of transportation concurrency and traffic circulation reports for compliance with the applicable criteria of the City Code; designing of City infrastructure related to transportation improvements on roadways; implementing, operating and maintaining the City's computerized multi-arterial traffic control system; maintaining and operating the City's traffic count program, and; investigating the feasibility of installing traffic signs and pavement markings so the general public has a safe, efficient flow and convenient transportation system.

Traffic Calming is defined as a combination of physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street use. The process for a Traffic Calming Program is as follows: (1) Neighborhood Association or citizen submits a petition to the City Engineer. (2) The formation of a Neighborhood Traffic Calming Task Force. (3) The traffic study area is determined. (4) The Engineering Department conducts a traffic study. (5) The Engineering Department presents traffic study results to the Neighborhood Task Force and together develops a Traffic Calming Master Plan. (6) The Task Force, together with the Engineering Department, holds an open house for the neighborhood to review the Traffic Calming Master Plan. (7) The Engineering Department, together with the Task Force, makes a recommendation to the City Commission for approval of the Traffic Calming Master Plan. (8) A public hearing is held and the City Commission approves or disapproves the Traffic Calming Master Plan. If the Plan is approved, the project goes to bid and construction of physical measures is implemented. (9) A follow-up traffic study is conducted by the Department of Engineering to determine the effectiveness of the measures implemented.

In 1985, the Florida Legislature enacted comprehensive growth management legislation to manage the growth and protect the state's straining infrastructure. The most potent component of this growth management act was a concept called "Concurrency" (Section 163.3180, Florida Statutes). It required that transportation needed to serve new development be in place or under construction no more than three years after issuance of a development order.

A "de minimis" impact is an impact that would not affect more than 1 percent (1%) of the maximum volume at the adopted level of service of the affected transportation facilities as determined by the City, utilizing the most recent table of the generalized two-way peak hour volumes in the Florida Department of Transportation (FDOT), Level of Service Handbook.

The Transportation Team ensures that no development approvals are issued that would degrade the Level of Service (LOS) conditions on roads below adopted standards. The City's adopted LOS standards are part of the City's comprehensive plan, Sarasota City Plan (1998).

Goal - Attractive, Safe & Environmentally-Friendly City

To plan and design roadways as a safe place for people and manage the City's transportation system to provide healthy neighborhoods.

ENGINEERING TRANSPORTATION

Objectives

Review the "Required Transportation Concurrency Information" application for determination of de minimis or if traffic study is required, 90% on time.

Conduct traffic concurrency and traffic circulation studies, 90% on time.

Monitor the traffic signal timing and respond 90% on time to requests.

Investigate the feasibility of installing traffic signs and pavement marking based on requests, 95% on time.

Performance Measures

Description	Unit	FY 2000	FY 2001	FY 2002	FY 2003
Output Measure					
Concurrency/traffic studies conducted	Number	n/a	n/a	344	378
Traffic signal timing software mgmt.	Number	n/a	n/a	500	555
Signs & pavement markings	Number	n/a	n/a	100	110
Effectiveness Measure					
Traffic studies completed w/i Agmt. Guid	Percent	n/a	n/a	90	92
Traffic signal timing inq. resolved 1wk.	Percent	n/a	n/a	90	92
Requests for signs/markings perf. 2 wks.	Percent	n/a	n/a	85	88
Efficiency Measure					
Cost per traffic concurrency & study	Dollars	n/a	n/a	\$122.74	\$114.07
Cost per software mgmt./signal timing	Dollars	n/a	n/a	\$64.27	\$59.93
Cost per request for signage & markings	Dollars	n/a	n/a	\$67.18	\$64.10

Expenditures By Category

	FY 2001 Actual	FY 2002 Budget	FY 2003 Continuation	FY 2003 Issues	FY 2003 Totals
Personal Expenditures	298,747	229,490	243,484	27,522	271,006
Non Personal Expenditures	7,553	32,930	27,835	3,500	31,335
Capital Expenditures	0	500	6,500	0	6,500
Totals	\$306,300	\$262,920	\$277,819	\$31,022	\$308,841

Personnel Summary

Actual Positions	5.00	5.00	0.75	5.75
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ENGINEERING

CONSTRUCTION INSPECTION/ADMINISTRATION

Mission Statement

To ensure that the City is a safe place for people through the permitting and inspection of construction projects and the monitoring of the right-of-way for compliance with City regulations.

Description of Operations

The City Engineer regulates the use of the City right-of-way. This responsibility includes permitting, inspection, planning, design and monitoring of the various uses of the right-of-way. A right-of-way is a strip of land acquired by reservation, dedication or condemnation. This right-of-way is intended for public uses such as roads, utilities, (both public and private) clear zones for traffic safety, sidewalks and pathways, bicycle lanes and trails, drainage facilities, signage and access between property and the roadway system.

PERMITTING:

As an element of overseeing the activities within the right-of-way, the Engineering Department is responsible for the oversight of construction of new facilities, the reconstruction of existing facilities as well as the construction of projects proposed by other City Departments, private developers and homeowners within the City right-of-way or their access to the right-of-way. This Team is responsible for permitting and inspection of all activities within the public right-of way. Permits issued by and inspected for compliance by this "cost center" Team are:

Sidewalk Café Permits - Due mainly to our beautiful climate, many local restaurants enjoy offering their guests the option of sitting outside while dining. To ensure that the dining establishment has addressed all comfort and safety measures, and since many times the Café will utilize public right-of-way, the City requires that a Sidewalk Café Permit be obtained. Note these are different from "Outdoor Restaurants", which are on private property and administered by the Building, Zoning and Code Enforcement Department.

Valet Parking Permits - Valet Parking Permits are requested by area businesses, including restaurants and theaters, for the convenience and benefit of their guests if they intend to use the right-of-way. Please note that valet parking must be available to the general public and not limited to patrons of the sponsoring business.

Encroachment Permits - Encroachment permits are required when an object has been placed in any right-of-way within the City.

Driveway Permits - When a business or homeowner wishes to provide vehicular access from their property to the City roadway system, they must apply for a driveway permit and construct this access in accordance with the Engineering Design Criteria Manual (EDCM). This manual provides engineering guidelines for work done within the City Limits.

Right-of-way Use Permits - Any other activity performed within the right-of-way, other than that already noted above is undertaken, a right-of-way use permit is required. This work may consist of activities such as work by a franchised utility (telephone, electric power, cable, gas, etc), work by a public utility (water and sewer) and infrastructure projects (streets, sidewalk, curb and gutter, etc).

Newsrack Permits - Newsracks are a typical part of any downtown street. Whether looking for a local, regional or national newspaper, or information on area homes for sale; for example, it is convenient to have newsracks placed at heavily traveled locations throughout the City. Due to the high demand for newsracks, the desire to maintain the beauty of our streets, and the need to protect our residents and visitors, the City of Sarasota has devised a set of standards to which all those wishing to place, fill, and maintain newsracks must adhere per City Code 30-130.

Construction Inspection - This cost center also provides full time construction inspection during Engineering Department initiated construction projects and for other departments when necessary. This includes coordination with the public, other City departments and utilities during the construction project, evaluation of pay requests, field directives, and change orders when necessary and final project acceptance.

ENGINEERING

CONSTRUCTION INSPECTION/ADMINISTRATION

Goal - Attractive, Safe & Environmentally-Friendly City

To permit and inspect projects under construction to ensure that the City is a safe place for people and to further ensure compliance with City regulations and maintain visual appeal of the City by frequent monitoring of the right-of-way.

Objectives

To provide consistent and frequent monitoring of the right-of-way for permit compliance on a weekly basis.

Construct 80% of projects on time.

Construct 85% of projects within budget.

Issue 90% of permits on time.

Performance Measures

Description	Unit	FY 2000	FY 2001	FY 2002	FY 2003
Output Measure					
Right-of-way inspections performed	Number	n/a	n/a	350	385
Projects constructed	Number	n/a	n/a	5	6
Permits issued	Number	n/a	n/a	478	526
Effectiveness Measure					
Right-of-way inspections performed	Percent	n/a	n/a	90	92
Projects completed on time	Percent	n/a	n/a	80	82
Projects completed within budget	Percent	n/a	n/a	85	88
Permits issued on schedule	Percent	n/a	n/a	90	92
Efficiency Measure					
Cost per right-of-way inspection	Dollars	n/a	n/a	\$49.57	\$46.64
Cost per permit issued	Dollars	n/a	n/a	\$36.29	\$34.14
Cost per in-house construction project	Dollars	n/a	n/a	\$14,493	\$10,050

Expenditures By Category

	FY 2001 Actual	FY 2002 Budget	FY 2003 Continuation	FY 2003 Issues	FY 2003 Totals
Personal Expenditures	174,285	261,033	251,184	13,530	264,714
Non Personal Expenditures	1,066	3,060	3,190	0	3,190
Capital Expenditures	0	0	0	0	0
Totals	\$175,351	\$264,093	\$254,374	\$13,530	\$267,904

Personnel Summary

Actual Positions	5.15	4.65	0.40	5.05
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ENGINEERING DESIGN

Mission Statement

To assure that plans for all public and private commercial projects are City Code compliant, feasibly and financially constructable.

Description of Operations

The City Engineer regulates the use of the City right-of-way. This responsibility includes permitting, inspection, planning, design and monitoring of the various uses of the right-of-way. A right-of-way is a strip of land acquired by reservation, dedication or condemnation. This right-of-way is intended for public uses such as roads, utilities, (both public and private) clear zones for traffic safety, sidewalks and pathways, bicycle lanes and trails, drainage facilities, signage and access between property and the roadway system.

As an element of regulating the activities within the right-of-way, the Engineering Department is responsible for the design of new facilities, the design for reconstruction of existing facilities as well as review of projects proposed by other City Departments and private developers within the City right-of-way or their access to the right-of-way.

The Planning and Design Team endeavors to provide well planned, City Code compliant infrastructure improvement projects through timely concise design (accomplished internally or externally) and code compliance development plan review (public and private development projects). To help facilitate the project design, the Engineering Department also has developed and maintains the Engineering Design Criteria Manual (EDCM) for use on all design projects, both public and private, within the City Limits.

Planning and Preliminary Design

Efforts toward proper project planning require extensive involvement with neighborhood representatives, and expenditures of a considerable amount of staff time in providing field locations required for both planning and construction determinations. Planning and review of proposed projects by this Team are prerequisite to creating project design internally or to negotiating to have the design contractually accomplished. Also the determination of the required right-of-way for a project is done during the preliminary design phase.

Final Design

After the completion of the preliminary planning and design, this Team is responsible for the project layout, final project design, construction drawings project specification and permitting. This can be done with in-house forces or through a consultant. This final design phase work effort includes obtaining the required permits, acquiring the necessary right-of-way, and completing the construction drawing and project specifications. Also included, is the evaluation of projects undertaken by private developers and well as other City Departments for compliance with the City of Sarasota Engineering Design Criteria Manual (EDCM).

Bidding and Award of Construction

Once the design and specifications are complete, the project goes out for public bidding through the City's Purchasing Department. This Team coordinates this work with the Purchasing Department, holds the pre-bid meeting, prepares any required addenda and recommends award of the construction contract.

Goal - Responsible City Government

To design and/or review projects to provide City Code compliance, feasibility and financially constructable projects by private and public entities.

ENGINEERING DESIGN

Objectives

Provide "review comments" for all plans within five business days of their receipt.

Design 80% of in-house projects on time.

Contract agreements to be at or below estimated cost 85% of the time.

Performance Measures

Description	Unit	FY 2000	FY 2001	FY 2002	FY 2003
Output Measure					
Plans reviewed	Number	n/a	192	345	380
In-house projects designed	Number	n/a	4	123	135
Contracts and agreements executed	Number	n/a	n/a	3	3
Effectiveness Measure					
Review comments provided on schedule	Percent	n/a	n/a	90	92
In-house designs accomplished	Percent	n/a	n/a	80	82
Est. & agmnts. negotiated w/i budget	Percent	n/a	n/a	85	88
Efficiency Measure					
Cost per plan review	Dollars	n/a	\$194.23	\$213.78	\$200.96
Cost per In-house design	Dollars	n/a	n/a	\$480.26	\$452.98
Consultant design costs, % of const.	Percent	n/a	n/a	25	25

Expenditures By Category

	FY 2001 Actual	FY 2002 Budget	FY 2003 Continuation	FY 2003 Issues	FY 2003 Totals
Personal Expenditures	206,069	257,653	302,752	11,838	314,590
Non Personal Expenditures	4,118	4,005	6,479	0	6,479
Capital Expenditures	1,148	600	600	0	600
Totals	\$211,335	\$262,258	\$309,831	\$11,838	\$321,669

Personnel Summary

Actual Positions	4.85	5.35	0.35	5.70
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ENGINEERING

SENIOR PLANNER II

The addition of a Sr. Planner II position in the Engineering Department provides the staff to accomplish tasks that cannot efficiently and effectively be accomplished with current staff. Some of the tasks/duties that the Engineering Department will accomplish as a result of this new position are:

- Explore and create more parking spaces in the public right-of-way. Objective 7 of the Transportation Chapter of the Sarasota City Plan states: "The City shall continue to explore and implement creative methods to prevent parking shortages, in conjunction with the Downtown Parking Committee.". Utilizing the current regulations of the recently adopted Engineering Design Criteria Manual (EDCM), additional parking spaces will be "found". It will allow resolution of resident's/businesses' concerns that relate to parking, striping, signage and intersection improvements in a more efficient and effective manner.

- Assist in management and implementation of:
Downtown Mobility Study
Downtown Parking Master Plan
City-Wide Transportation Master Plan
17th Street PD&E Study

- Implement and maintain the land use computer modeling software. Utilizing the software proposed to be obtained as part of the City-Wide Transportation Master Plan, will allow the ability to model and evaluate the capacity of roads and, in conjunction with the Planning Department, evaluate the effect on land use changes and development orders.

- Develop and maintain transportation data. Utilizing traffic count data from City, County and State sources, will permit continuous monitoring of the adopted transportation levels of service (LOS) and will allow the maintenance of a database to "track" vested traffic from approved developments.

- Prepare Evaluation and Appraisal Reports. This document is due in November 2005. The subsequent revision of the Transportation Chapter of the Sarasota City Plan will incorporate results of various transportation studies currently in progress or planned.

- Evaluate the transportation network and land use scenarios. Each proposed change in land use requires an analysis of transportation concurrency. This position and the computer modeling software will allow such to be accomplished in a much quicker mode and will allow for the recommendation of appropriate changes in conjunction with land use policies.

Cost of Issue

Personal Services	38,134
Non Personal	4,300
Capital	4,250
Transfers	0
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Total	\$46,684

ENGINEERING

ENGINEERING TECH. IV

The FY 2002-2003 Capital Improvement Plan (CIP) includes several new projects which will add significantly to the department workload. With the approval of stormwater funding by the City Commission, department staff will have many stormwater projects to complete. With the success of the neighborhood traffic-calming program, additional funds are required for this program. The goal for the traffic-calming program is to complete more projects in a shorter time frame. The Department will also develop a systematic plan for the repair and/or replacement of seawalls, many of which have had little or no maintenance since installation. Finally, with the completion of the Neighborhood Action Plan, staff have many small infrastructure improvement projects to complete and the department wishes to design and complete these small projects as quickly as possible.

To help the department continue to serve the public in a timely manner while increasing the number of projects, an Engineering Tech. IV is funded to work in the design and construction divisions of the department. This position will also work in the design and construction divisions of the department including design, surveying and construction phases of stormwater projects, small infrastructure improvement projects and traffic calming projects.

Cost of Issue

Personal Services	33,823
Non Personal	0
Capital	0
Transfers	0
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Total	\$33,823