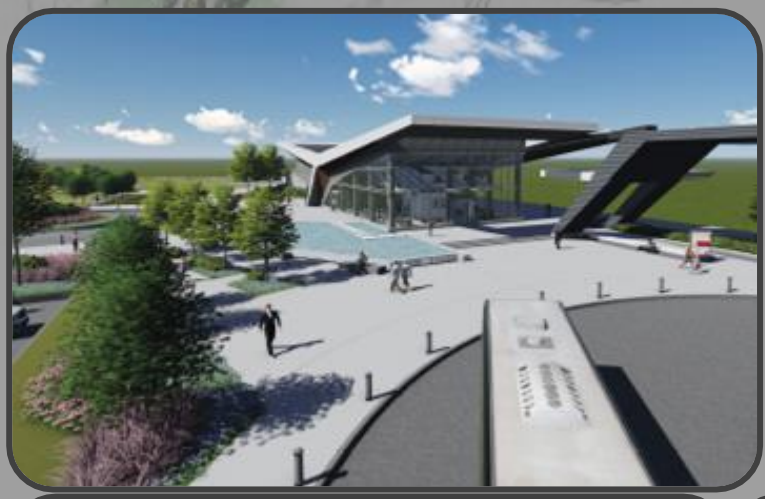
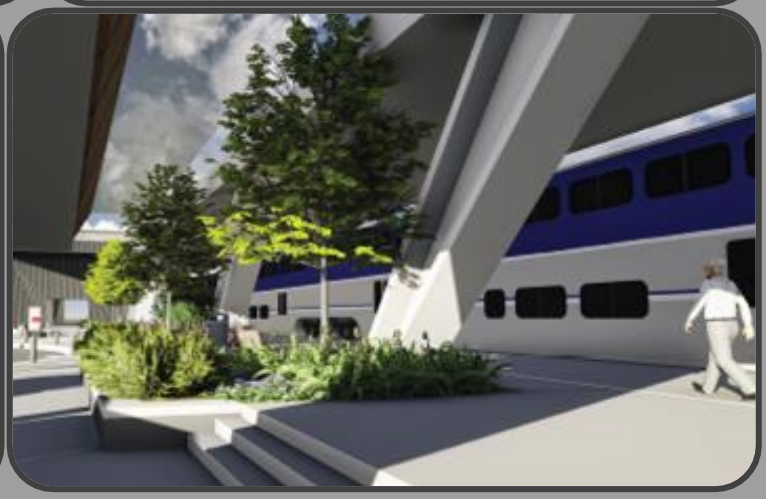
FY 2017 – FY 2021

Capital Improvements Plan
City Manager Recommendation
October 2015

APPROVED
December 8, 2015

City Council passed Resolution 12873-15 approving the Capital Improvements Plan for FY 2017 – FY 2021. The City Manager Recommended Plan reflected in this book was approved with no changes.





Newport News
Where Great Things Are Happening

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Newport News Transportation Center

Renderings by Parsons Brinckerhoff and Niles Bolton Associates

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RESOLUTION NO. 12873-15

A RESOLUTION APPROVING A CAPITAL IMPROVEMENTS PLAN FOR THE FISCAL YEAR 2017 TO THE FISCAL YEAR 2021 FOR THE CITY OF NEWPORT NEWS, VIRGINIA.

WHEREAS, the Council of the City of Newport News, Virginia (the Council), reviews and controls its capital expenditures through the annual preparation and implementation of a multi-year capital improvements plan (CIP); and

WHEREAS, a CIP reflects the vision and priorities of the Council with respect to the need for the construction and maintenance of those buildings, improvements and services deemed to be capital expenditures of the City and the need for multi-year funding for certain such projects; and

WHEREAS, although a CIP is intended to be a commitment to a long-range capital improvements program, it is fundamentally a planning document and is, therefore, subject to modification and amendment by the Council as changing priorities, the availability of revenues and other factors create the predicate for such modification and amendment; and

WHEREAS, in accordance with Section 2-16 of the City Code, the City Manager prepared a proposed CIP for the City for the Fiscal Year 2017 to the Fiscal Year 2021 under cover of a memorandum from the City Manager to the Council dated October 27, 2015; and

WHEREAS, the Council has itself conducted a thorough review of the proposal at a work session conducted on October 27, 2015, and at two subsequent work sessions; and

WHEREAS, the Council is prepared to approve a CIP and direct the City Manager to plan for and present for funding those projects listed as Fiscal Year 2017 projects.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Newport News, Virginia:

1. That it desires to, and hereby does, approve the Capital Improvements Plan for the Fiscal Year 2017 to the Fiscal Year 2021 presented to the Council under cover of a memorandum from the City Manager to the Council dated October 27, 2015, a summary of which Plan is attached hereto.

2. That it hereby authorizes and directs the City Manager to plan for and present to the Council for funding during Fiscal Year 2017 those projects listed in the hereby-approved Capital Improvements Plan for Fiscal Year 2017. In recognition of the nature of a CIP as a planning instrument, this directive to the City Manager shall not be construed to establish an obligation that

the Council must approve or fund any individual project so listed.

3. That this resolution shall be in effect on and after the date of its adoption, December 8, 2015.

PASSED BY THE COUNCIL OF THE CITY OF NEWPORT NEWS ON DECEMBER 8, 2015

Mabel Washington Jenkins, MMC
City Clerk

McKinley L. Price, DDS
Mayor

A true copy, teste:

City Clerk

City of Newport News

Capital Improvements Plan

FY 2017 – FY 2021

City Council Approved

McKinley L. Price, DDS
Mayor

Robert S. Coleman
Vice Mayor

Herbert H. Bateman, Jr.
Councilman

Saundra Nelson Cherry, D. Min.
Councilwoman

Sharon P. Scott
Councilwoman

Tina L. Vick
Councilwoman

Dr. Patricia P. Woodbury
Councilwoman

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City Manager

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Director of Budget and Evaluation

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Background

Capital Improvements Plan (CIP) Definition and Rationale

The Capital Improvements Plan is the City's five-year plan that establishes both a schedule and funding strategy for high-priority capital projects and equipment purchases. Examples of CIP projects include replacement of major building systems (including roofs and heating, ventilation, and air conditioning) and renovation at our public and school buildings and facilities, improvement of park facilities, installation and rehabilitation of infrastructure, purchase of major equipment including fire vehicles and school buses, support for community facilities, and investments to encourage and support development and redevelopment throughout the City. The FY 2017 CIP encompasses the five-year period from FY 2017 to FY 2021.

Preparation of the CIP promotes improved coordination of community planning, asset maintenance and preservation, and physical development and redevelopment efforts and ensures that the capital budget adheres to the City's Capital Financing and Debt Management Policies. Development of the CIP:

- Allows for the systematic evaluation of capital projects and equipment purchases
- Provides for the preservation of capital assets
- Keeps the public informed about future needs and projects and focuses attention on community objectives
- Fosters the cooperation and coordination of the activities of interrelated departments to encourage the most efficient deployment of available resources
- Relates public facilities and other public and private development and redevelopment policies and plans
- Identifies the most economical means of financing capital projects and enhances the City's ability to manage its level of indebtedness and resulting fiscal capacity
- Facilitates coordination between capital needs and the operating budget

CIP Preparation

Preparation of the Capital Improvements Plan begins with submission of capital project requests by departments in July and concludes with City Council adoption, typically occurring the following January.

1. *Departmental Submission of CIP Requests*

   In July, Departments may request continued funding for projects approved as part of the FY 2016 CIP (current CIP), or submit new requests for projects that were not approved in the FY 2016 plan or that have been identified subsequent to the FY 2016 CIP process.

   As part of each request, Departments must provide a detailed narrative, with information to include specific details regarding dimensions, characteristics, quantities, unusual conditions and any other information useful in the explanation of the project. The justification for the project must offer specific rationale for the necessity of the project or piece of equipment. A

description and quantification of anticipated impacts to the operating budget created by implementation of the capital project or purchase of equipment is also required. An anticipated performance/outcome measures field is included to capture the impact on the community and City organization expected to result from completion of the project.

2. *CIP Evaluation Team*

The CIP evaluation team is assembled in September, with representation from departments most impacted by the outcome of the CIP planning process, and coordinated by the Department of Budget and Evaluation. The team meets in September and October to evaluate and prioritize each request based on criteria including legal requirement, magnitude of need, continuation of prior commitment, impact on the operating budget, cost/benefit, and consistency with established Strategic Initiatives. The group is empowered to adjust project amounts and schedules, as well as revise funding sources, to best reflect citywide capital priorities and deliver a plan that adheres to established capital financing and debt management policies. Once final changes are complete, the evaluation team submits a draft capital investment strategy to the City Manager for consideration.

3. *City Manager Recommendation*

In October, the City Manager and Assistant City Managers review the draft strategy and make any necessary adjustments to best reflect the City's Strategic Initiatives and citywide capital priorities. Once changes are finalized, the City Manager Recommended CIP book is prepared and provided to City Council. City Code Section 2.16 requires that the CIP be updated on an annual basis and that a revised City Manager Recommended CIP be submitted to City Council by each November 1.

4. *City Council Review*

City Council Work Sessions are scheduled in October, November, and December to present the City Manager Recommended CIP, provide project specific details, and respond to City Council inquiries. The CIP is adjusted to reflect City Council revisions, with final approval anticipated in January. The City Council Approved CIP book is prepared and posted to the City's website (http://www.nnva.gov/168/Capital-Improvement-Plan). The website also hosts CIP documents approved from FY 2009 through FY 2016.

How to Use This Book

Please refer to the information in this "How to Use" guide to assist with review of the FY 2017 Approved CIP.

SUMMARY SECTION

The "SUMMARY" section provides summary information for both the FY 2016 Approved CIP approved by City Council in January 2015 [see page 8] and the FY 2017 Approved CIP [see page 10]. Summary information for the FY 2016 Approved CIP reflects planned capital investment during the 5-year period from FY 2016 to FY 2020. The summary information for the FY 2017 Approved CIP includes capital investment from FY 2017 - FY 2021 approved by City Council pursuant to adoption on December 8, 2015 of Resolution No. 12873-15.

Division and Categorization of the CIP

The summaries reflect the broad division of the CIP into "General Fund" or "Self-Supporting Fund" projects. Capital expenses (typically cash capital or debt service related to the issuance of bonds) for projects within the General Fund are paid from General Fund revenue sources, which includes taxes, fees, and fines. Capital expenses for projects in the Self-Supporting Funds are paid from user-fees generated by the associated fund. General Fund and Self-Supporting Funds projects are further categorized into groups to reflect related types of investment and activities. See the table below for further detail regarding categories.

CIP Categories

General Fund

- Community Development
- Environmental
- Community Facilities
- Transit
- Equipment
- Parks, Recreation and Tourism
- Public Buildings
- Schools
- Streets and Bridges

Self-Supporting Funds

- Public Utilities
- Sewer Rehabilitation
- Solid Waste
- Stormwater Drainage

Funding Sources

Funding identified in the FY 2017 Approved CIP to support capital projects adheres to the City's established Capital Financing and Debt Management Policies (see the Capital Financing and Debt Management Policies summary at the end of the "How to" section for more information on the policies). Sources of funds include:

- **Cash Capital:** Funds for capital projects budgeted in the General Fund Operating Budget, appropriated from General Fund Balance, or appropriated from the Capital Reserve Fund

- **General Obligation Bonds (GOB):** Proceeds from the issuance of General Obligation Bonds with debt service paid from the General Fund

- **Stormwater Management Fund:** Funding for Stormwater Drainage and Water Quality projects from Stormwater Management Fund revenue. Supports Stormwater GOB and Cash Capital funded projects.

- **Sewer User Fee:** Funding for Sanitary Sewer Rehabilitation projects from Wastewater Fund revenue. Supports sanitary sewer GOB and Cash Capital funded projects.

- **Solid Waste Fee:** Funding for Solid Waste projects from Solid Waste Revolving Fund revenue. Supports Solid Waste GOB and Cash Capital funded projects.

- **Water Revenue Bonds:** Funding for Public Utilities projects from Public Utilities revenue sources. Supports Water Revenue Bond, GOB, and Cash Capital funded projects.

- **Grant Funding:** Anticipated Federal or State Grant support

- **Other:** Any additional funding that does not fit into one of the categories above (for example, Developer Contribution)

INVESTMENT BY DISTRICT

The table and pie chart on pages 12 and 13 detail the level of spending by City District represented by the projects proposed in the FY 2017 Approved CIP. Waterworks projects are identified as Waterworks projects and are not included in the District calculations. Projects with impact across multiple districts are identified as "Citywide".

CATEGORY SECTIONS

For ease of use, and consistent with the category breakdown detailed above, this book is divided into sections based on CIP Category.

Map
Each category section begins with a City map that identifies the location of the projects approved within that category. Projects that have citywide or regional impact are listed accordingly and reflected below the map (also above, in the case of Public Utilities).

Summaries
Following the city map, 5-year summary tables are presented for both the FY 2016 Approved CIP (summary on the left page – see upper right corner of page for indication as "Approved") and the FY 2017 Approved CIP (summary on the right page – see upper right corner of page for indication as "Approved"). The side-by-side layout of these two pages allows for comparison of the plans.

Project Sheets
A detailed information sheet is provided for each project included as part of the FY2017 Approved CIP. Project information includes project title, location, associated City Department and project contact information, CIP category, and project description and justification. Proposed sources of funds, the plan for project spending, potential operating budget impact created by the project, and anticipated outcome/performance measures are also provided, as is a project-specific location map.

Summary of Capital Financing and Debt Management Policies

The CIP must adhere to the City's established Capital Financing and Debt Management Policies. A summary of these policies is provided below.

- **Debt Burden**

  The City's goal is to reduce the debt burden to 3.0% or less by FY 2012. Debt Burden is defined as the ratio of outstanding general obligation debt and capital lease obligations divided by the value of total taxable real and personal property.

- **Cash Capital**

  The City's intent is to fund the purchase of equipment and capital project expenditures to the maximum extent possible with cash appropriated within the Operating Budget or from General Fund operating reserves generated in prior fiscal years. The substitution of cash capital funding for the issuance of general obligation debt reduces long-term interest payments and also facilitates the achievement and maintenance of a debt burden of 3% or less. It is the goal of City Council to finance 20% of the CIP with cash capital by FY 2012.

- **Annual Debt Service Ratio**

  General Fund debt service obligations are funded primarily from school and municipal revenues received through the Operating Budget. The City's intent is that the ratio of debt service obligations to General Fund revenue shall not exceed 9.5% in any fiscal year.

- **Principal Repayment**

  The City's intent is to structure principal payments when issuing new General Obligation debt or refinancing existing debt so that no less than 30% of outstanding debt is scheduled to be repaid within five years, and that no less than 60% is scheduled to be repaid in ten years.

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SUMMARY

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Approved Capital Improvements Plan
FY2016 - FY2020

GENERAL FUND - BY CATEGORY	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5-YEAR TOTAL
COMMUNITY DEVELOPMENT						
Cash Capital - Operating Budget	$760,000	$260,000	$270,000	$270,000	$280,000	$1,840,000
Gen Obligation Bond (GOB)	$16,250,000	$17,250,000	$5,700,000	$6,550,000	$6,800,000	$52,550,000
Grant Funding	$4,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$8,000,000
Total Community Development	**$21,010,000**	**$18,510,000**	**$6,970,000**	**$7,820,000**	**$8,080,000**	**$62,390,000**
ENVIRONMENTAL						
Cash Capital - Operating Budget	$225,000	$225,000	$225,000	$225,000	$225,000	$1,125,000
Gen Obligation Bond (GOB)	$0	$186,000	$384,000	$0	$0	$570,000
Total Environmental	**$225,000**	**$411,000**	**$609,000**	**$225,000**	**$225,000**	**$1,695,000**
COMMUNITY FACILITIES						
Cash Capital - Operating Budget	$455,000	$0	$0	$0	$0	$455,000
Total Community Facilities	**$455,000**	**$0**	**$0**	**$0**	**$0**	**$455,000**
TRANSIT						
Gen Obligation Bond (GOB)	$495,000	$46,250	$75,000	$75,000	$75,000	$766,250
Grant Funding	$6,936,232	$26,500,000	$4,563,768	$0	$0	$38,000,000
Total Transit	**$7,431,232**	**$26,546,250**	**$4,638,768**	**$75,000**	**$75,000**	**$38,766,250**
EQUIPMENT						
Cash Capital - Operating Budget	$1,160,000	$2,540,324	$2,430,000	$910,000	$1,700,000	$8,740,324
Total Equipment	**$1,160,000**	**$2,540,324**	**$2,430,000**	**$910,000**	**$1,700,000**	**$8,740,324**
PARKS AND RECREATION						
Cash Capital - Operating Budget	$245,000	$245,000	$245,000	$275,000	$275,000	$1,285,000
Gen Obligation Bond (GOB)	$650,000	$750,000	$1,620,000	$4,165,000	$3,524,900	$10,709,900
Grant Funding	$380,000	$380,000	$380,000	$200,000	$200,000	$1,540,000
Other	$670,000	$0	$0	$0	$0	$670,000
Total Parks and Recreation	**$1,945,000**	**$1,375,000**	**$2,245,000**	**$4,640,000**	**$3,999,900**	**$14,204,900**
PUBLIC BUILDINGS						
Cash Capital - Operating Budget	$1,096,531	$998,702	$975,000	$525,000	$750,000	$4,345,233
Gen Obligation Bond (GOB)	$1,100,000	$1,100,000	$1,675,000	$2,800,000	$15,275,000	$21,950,000
Grant Funding	$98,844	$149,568	$0	$0	$0	$248,412
Total Public Buildings	**$2,295,375**	**$2,248,270**	**$2,650,000**	**$3,325,000**	**$16,025,000**	**$26,543,645**
SCHOOLS						
Cash Capital - Operating Budget	$2,000,000	$2,000,000	$2,000,000	$2,500,000	$2,500,000	$11,000,000
Gen Obligation Bond (GOB)	$5,186,000	$5,136,000	$6,632,000	$6,686,000	$5,732,000	$29,372,000
Total Schools	**$7,186,000**	**$7,136,000**	**$8,632,000**	**$9,186,000**	**$8,232,000**	**$40,372,000**
STREETS AND BRIDGES						
Cash Capital - Operating Budget	$2,025,000	$2,025,000	$2,025,000	$2,425,000	$2,525,000	$11,025,000
Gen Obligation Bond (GOB)	$1,504,214	$2,632,233	$11,834,671	$10,224,864	$1,549,647	$27,745,629
Grant Funding	$10,460,000	$25,044,345	$38,398,448	$18,194,054	$3,050,000	$95,146,847
Other	$0	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$10,000,000
Total Streets and Bridges	**$13,989,214**	**$32,201,578**	**$54,758,119**	**$33,343,918**	**$9,624,647**	**$143,917,476**

GENERAL FUND - BY FUNDING SOURCE	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5-YEAR TOTAL
Total Cash Capital - Operating Budget	$7,966,531	$8,294,026	$8,170,000	$7,130,000	$8,255,000	$39,815,557
Total Gen Obligation Bond (GOB)	$25,185,214	$27,100,483	$27,920,671	$30,500,864	$32,956,547	$143,663,779
TOTAL GF CASH AND GO BONDS	**$33,151,745**	**$35,394,509**	**$36,090,671**	**$37,630,864**	**$41,211,547**	**$183,479,336**
Cash Capital Percentage	24.0%	23.4%	22.6%	18.9%	20.0%	21.7%
Total Grant Funding	$21,875,076	$53,073,913	$44,342,216	$19,394,054	$4,250,000	$142,935,259
Total Other	$670,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$10,670,000
TOTAL GF - ALL FUNDING SOURCES	**$55,696,821**	**$90,968,422**	**$82,932,887**	**$59,524,918**	**$47,961,547**	**$337,084,595**

Approved Capital Improvements Plan
FY2016 - FY2020

SELF-SUPPORTING FUNDS	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5-YEAR TOTAL
SEWER REHABILITATIONS						
Gen Obligation Bond (GOB)	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$25,000,000
Total Sewer Rehabilitations	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$25,000,000**
STORMWATER DRAINAGE						
Cash Capital - Operating Budget	$3,131,250	$3,627,500	$3,135,500	$2,950,000	$2,992,000	$15,836,250
Gen Obligation Bond (GOB)	$4,043,750	$4,022,500	$4,000,000	$3,875,000	$4,008,000	$19,949,250
Grant Funding	$2,674,500	$1,025,000	$0	$0	$0	$3,699,500
Total Stormwater Drainage	**$9,849,500**	**$8,675,000**	**$7,135,500**	**$6,825,000**	**$7,000,000**	**$39,485,000**
WATERWORKS						
Cash Capital - Operating Budget	$8,815,000	$6,580,000	$10,280,000	$10,130,000	$6,130,000	$41,935,000
Revenue Bonds	$17,040,000	$12,600,000	$6,100,000	$0	$0	$35,740,000
Total Waterworks	**$25,855,000**	**$19,180,000**	**$16,380,000**	**$10,130,000**	**$6,130,000**	**$77,675,000**

TOTAL	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5-YEAR TOTAL
General Fund	$55,696,821	$90,968,422	$82,932,887	$59,524,918	$47,961,547	$337,084,595
Self-Supporting Fund	$40,704,500	$32,855,000	$28,515,500	$21,955,000	$18,130,000	$142,160,000
TOTAL - ALL FUNDS	**$96,401,321**	**$123,823,422**	**$111,448,387**	**$81,479,918**	**$66,091,547**	**$479,244,595**

Approved Capital Improvements Plan
FY2017 - FY2021

GENERAL FUND - BY CATEGORY	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5-YEAR TOTAL
COMMUNITY DEVELOPMENT						
Cash Capital - Operating Budget	$260,000	$270,000	$270,000	$280,000	$280,000	$1,360,000
Gen Obligation Bond (GOB)	$17,250,000	$5,700,000	$7,150,000	$6,500,000	$6,700,000	$43,300,000
Grant Funding	$1,000,000	$1,000,000	$2,900,000	$2,500,000	$1,000,000	$8,400,000
Total Community Development	**$18,510,000**	**$6,970,000**	**$10,320,000**	**$9,280,000**	**$7,980,000**	**$53,060,000**
ENVIRONMENTAL						
Cash Capital - Operating Budget	$225,000	$225,000	$225,000	$225,000	$225,000	$1,125,000
Total Environmental	**$225,000**	**$225,000**	**$225,000**	**$225,000**	**$225,000**	**$1,125,000**
TRANSIT						
Cash Capital - Operating Budget	$146,250	$325,000	$75,000	$75,000	$95,950	$717,200
Grant Funding	$12,500,000	$11,813,768	$7,000,000	$0	$0	$31,313,768
Total Transit	**$12,646,250**	**$12,138,768**	**$7,075,000**	**$75,000**	**$95,950**	**$32,030,968**
EQUIPMENT						
Cash Capital - Operating Budget	$2,690,000	$3,128,500	$3,085,000	$1,230,000	$2,790,000	$12,923,500
Grant Funding	$0	$250,000	$0	$0	$0	$250,000
Total Equipment	**$2,690,000**	**$3,378,500**	**$3,085,000**	**$1,230,000**	**$2,790,000**	**$13,173,500**
PARKS AND RECREATION						
Cash Capital - Operating Budget	$420,000	$420,000	$570,000	$300,000	$300,000	$2,010,000
Gen Obligation Bond (GOB)	$750,000	$1,620,000	$3,950,000	$3,330,000	$3,575,000	$13,225,000
Grant Funding	$150,000	$150,000	$150,000	$200,000	$360,000	$1,010,000
Total Parks and Recreation	**$1,320,000**	**$2,190,000**	**$4,670,000**	**$3,830,000**	**$4,235,000**	**$16,245,000**
PUBLIC BUILDINGS						
Cash Capital - Operating Budget	$1,150,326	$1,225,000	$625,000	$2,296,000	$500,000	$5,796,326
Gen Obligation Bond (GOB)	$1,100,000	$1,675,000	$2,800,000	$15,275,000	$11,000,000	$31,850,000
Grant Funding	$149,568	$0	$0	$0	$0	$149,568
Total Public Buildings	**$2,399,894**	**$2,900,000**	**$3,425,000**	**$17,571,000**	**$11,500,000**	**$37,795,894**
SCHOOLS						
Cash Capital - Operating Budget	$2,000,000	$2,000,000	$2,500,000	$2,500,000	$2,500,000	$11,500,000
Gen Obligation Bond (GOB)	$5,136,000	$6,632,000	$6,686,000	$5,732,000	$5,732,000	$29,918,000
Total Schools	**$7,136,000**	**$8,632,000**	**$9,186,000**	**$8,232,000**	**$8,232,000**	**$41,418,000**
STREETS AND BRIDGES						
Cash Capital - Operating Budget	$2,125,000	$2,125,000	$2,425,000	$2,525,000	$2,725,000	$11,925,000
Gen Obligation Bond (GOB)	$9,084,965	$7,516,000	$4,839,965	$3,785,465	$6,335,522	$31,561,917
Grant Funding	$49,995,705	$16,983,448	$13,401,569	$6,000,000	$8,000,000	$94,380,722
Other	$425,000	$0	$2,500,000	$2,500,000	$2,500,000	$7,925,000
Total Streets and Bridges	**$61,630,670**	**$26,624,448**	**$23,166,534**	**$14,810,465**	**$19,560,522**	**$145,792,639**

GENERAL FUND - BY FUNDING SOURCE	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5-YEAR TOTAL
Total Cash Capital - Operating Budget	$9,016,576	$9,718,500	$9,775,000	$9,431,000	$9,415,950	$47,357,026
Total Gen Obligation Bond (GOB)	$33,320,965	$23,143,000	$25,425,965	$34,622,465	$33,342,522	$149,854,917
TOTAL GF CASH AND GO BONDS	**$42,337,541**	**$32,861,500**	**$35,200,965**	**$44,053,465**	**$42,758,472**	**$197,211,943**
Cash Capital Percentage	21.3%	29.6%	27.8%	21.4%	22.0%	24.0%
Total Grant Funding	$63,795,273	$30,197,216	$23,451,569	$8,700,000	$9,360,000	$135,504,058
Total Other	$425,000	$0	$2,500,000	$2,500,000	$2,500,000	$7,925,000
TOTAL GF - ALL FUNDING SOURCES	**$106,557,814**	**$63,058,716**	**$61,152,534**	**$55,253,465**	**$54,618,472**	**$340,641,001**

Approved Capital Improvements Plan
FY2017 - FY2021

SELF-SUPPORTING FUNDS	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5-YEAR TOTAL
SEWER REHABILITATIONS						
Gen Obligation Bond (GOB)	$5,150,000	$5,304,500	$5,463,635	$5,627,544	$5,796,370	$27,342,049
Total Sewer Rehabilitations	**$5,150,000**	**$5,304,500**	**$5,463,635**	**$5,627,544**	**$5,796,370**	**$27,342,049**
SOLID WASTE						
Cash Capital - Operating Budget	$450,000	$0	$0	$0	$0	$450,000
Total Solid Waste	**$450,000**	**$0**	**$0**	**$0**	**$0**	**$450,000**
STORMWATER DRAINAGE						
Cash Capital - Operating Budget	$3,683,500	$2,810,000	$3,220,000	$2,994,000	$3,028,600	$15,736,100
Gen Obligation Bond (GOB)	$5,781,950	$5,472,700	$5,021,250	$5,493,000	$5,913,000	$27,681,900
Grant Funding	$761,250	$811,250	$568,750	$0	$0	$2,141,250
Other	$4,710,000	$0	$0	$0	$1,318,000	$6,028,000
Total Stormwater Drainage	**$14,936,700**	**$9,093,950**	**$8,810,000**	**$8,487,000**	**$10,259,600**	**$51,587,250**
WATERWORKS						
Cash Capital - Operating Budget	$5,740,000	$6,530,000	$5,830,000	$8,230,000	$5,730,000	$32,060,000
Revenue Bonds	$34,200,000	$8,950,000	$5,700,000	$2,000,000	$0	$50,850,000
Total Waterworks	**$39,940,000**	**$15,480,000**	**$11,530,000**	**$10,230,000**	**$5,730,000**	**$82,910,000**

TOTAL	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5-YEAR TOTAL
General Fund	$106,557,814	$63,058,716	$61,152,534	$55,253,465	$54,618,472	$340,641,001
Self-Supporting Fund	$60,476,700	$29,878,450	$25,803,635	$24,344,544	$21,785,970	$162,289,299
TOTAL - ALL FUNDS	**$167,034,514**	**$92,937,166**	**$86,956,169**	**$79,598,009**	**$76,404,442**	**$502,930,300**

Approved Capital Improvements Plan
FY2017 - FY2021

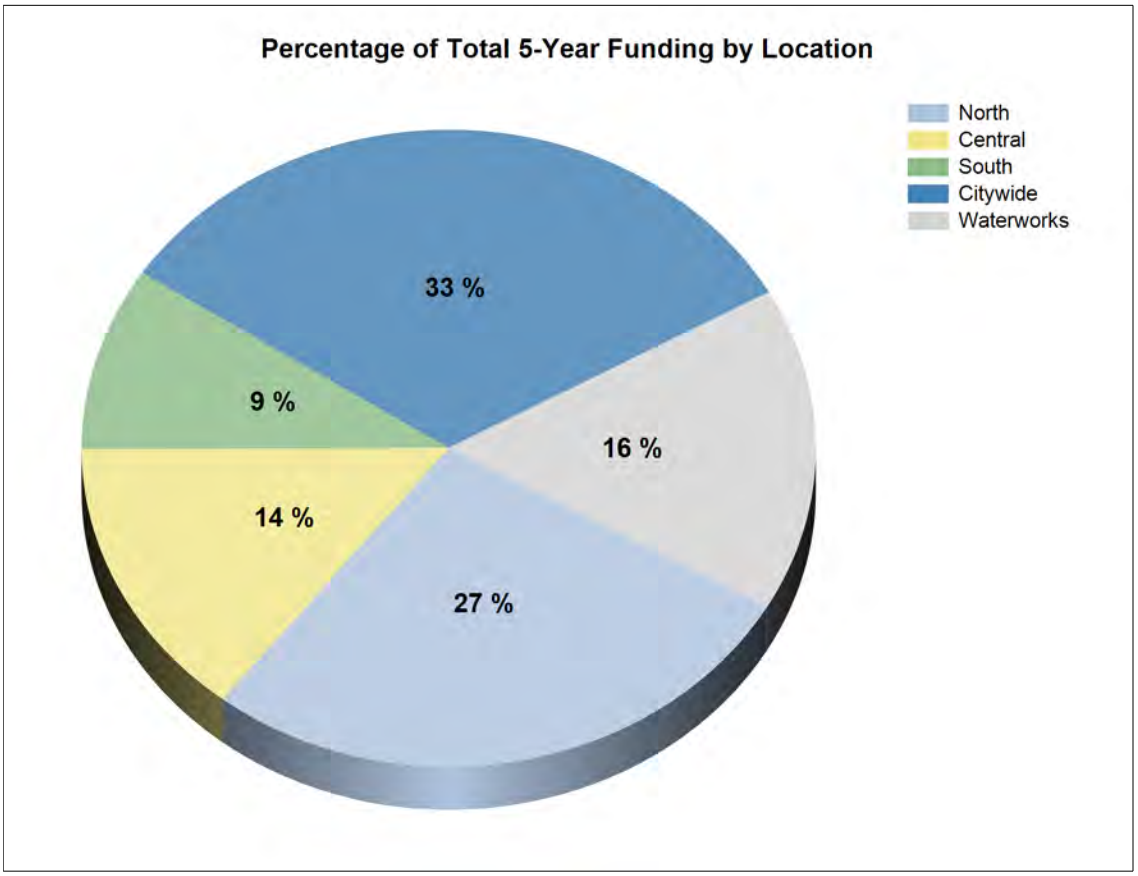
Summary of Funding by Location and Category

LOCATION	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
NORTH						
Community Development	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
Parks and Recreation	$75,000	$228,000	$2,906,000	$2,425,000	$1,635,000	**$7,269,000**
Public Buildings	$0	$0	$1,600,000	$13,800,000	$8,700,000	**$24,100,000**
Schools	$2,325,000	$0	$5,500,000	$264,000	$0	**$8,089,000**
Solid Waste	$450,000	$0	$0	$0	$0	**$450,000**
Stormwater Drainage	$4,800,000	$1,958,000	$0	$154,500	$870,000	**$7,782,500**
Streets and Bridges	$44,735,705	$14,618,448	$17,351,569	$5,000,000	$5,000,000	**$86,705,722**
Total	**$52,885,705**	**$17,304,448**	**$27,857,569**	**$22,143,500**	**$16,705,000**	**$136,896,222**
CENTRAL						
Community Development	$15,000,000	$3,250,000	$6,300,000	$5,000,000	$2,500,000	**$32,050,000**
Parks and Recreation	$100,000	$100,000	$100,000	$0	$990,000	**$1,290,000**
Public Buildings	$0	$125,000	$125,000	$0	$0	**$250,000**
Schools	$2,811,000	$1,055,000	$394,000	$2,750,000	$5,633,000	**$12,643,000**
Stormwater Drainage	$6,828,200	$3,434,950	$5,055,000	$4,821,500	$4,562,000	**$24,701,650**
Streets and Bridges	$1,250,000	$0	$0	$0	$100,000	**$1,350,000**
Total	**$25,989,200**	**$7,964,950**	**$11,974,000**	**$12,571,500**	**$13,785,000**	**$72,284,650**
SOUTH						
Community Development	$2,260,000	$2,470,000	$2,770,000	$2,780,000	$3,980,000	**$14,260,000**
Parks and Recreation	$0	$575,000	$195,000	$0	$25,000	**$795,000**
Public Buildings	$749,894	$500,000	$0	$1,796,000	$0	**$3,045,894**
Schools	$0	$5,577,000	$792,000	$2,718,000	$99,000	**$9,186,000**
Stormwater Drainage	$2,125,500	$1,953,600	$1,834,000	$1,530,000	$2,781,000	**$10,224,100**
Streets and Bridges	$5,000,000	$4,500,000	$0	$0	$0	**$9,500,000**
Total	**$10,135,394**	**$15,575,600**	**$5,591,000**	**$8,824,000**	**$6,885,000**	**$47,010,994**
CITYWIDE						
Community Development	$750,000	$750,000	$750,000	$1,000,000	$1,000,000	**$4,250,000**
Environmental	$225,000	$225,000	$225,000	$225,000	$225,000	**$1,125,000**
Equipment	$2,690,000	$3,378,500	$3,085,000	$1,230,000	$2,790,000	**$13,173,500**
Parks and Recreation	$1,145,000	$1,287,000	$1,469,000	$1,405,000	$1,585,000	**$6,891,000**
Public Buildings	$1,650,000	$2,275,000	$1,700,000	$1,975,000	$2,800,000	**$10,400,000**
Schools	$2,000,000	$2,000,000	$2,500,000	$2,500,000	$2,500,000	**$11,500,000**
Sewer Rehabilitations	$5,150,000	$5,304,500	$5,463,635	$5,627,544	$5,796,370	**$27,342,049**
Stormwater Drainage	$1,183,000	$1,747,400	$1,921,000	$1,981,000	$2,046,600	**$8,879,000**
Streets and Bridges	$10,644,965	$7,506,000	$5,814,965	$9,810,465	$14,460,522	**$48,236,917**
Transit	$12,646,250	$12,138,768	$7,075,000	$75,000	$95,950	**$32,030,968**
Total	**$38,084,215**	**$36,612,168**	**$30,003,600**	**$25,829,009**	**$33,299,442**	**$163,828,434**
WATERWORKS						
Waterworks	$39,940,000	$15,480,000	$11,530,000	$10,230,000	$5,730,000	**$82,910,000**
Total	**$39,940,000**	**$15,480,000**	**$11,530,000**	**$10,230,000**	**$5,730,000**	**$82,910,000**

Summary of Funding by Location

LOCATION	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
NORTH	$52,885,705	$17,304,448	$27,857,569	$22,143,500	$16,705,000	**$136,896,222**
CENTRAL	$25,989,200	$7,964,950	$11,974,000	$12,571,500	$13,785,000	**$72,284,650**
SOUTH	$10,135,394	$15,575,600	$5,591,000	$8,824,000	$6,885,000	**$47,010,994**
CITYWIDE	$38,084,215	$36,612,168	$30,003,600	$25,829,009	$33,299,442	**$163,828,434**
WATERWORKS	$39,940,000	$15,480,000	$11,530,000	$10,230,000	$5,730,000	**$82,910,000**
TOTAL	**$167,034,514**	**$92,937,166**	**$86,956,169**	**$79,598,009**	**$76,404,442**	**$502,930,300**

LOCATION	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
NORTH	32%	19%	32%	28%	22%	**27%**
CENTRAL	16%	9%	14%	16%	18%	**14%**
SOUTH	6%	17%	6%	11%	9%	**9%**
CITYWIDE	23%	39%	35%	32%	44%	**33%**
WATERWORKS	24%	17%	13%	13%	7%	**16%**



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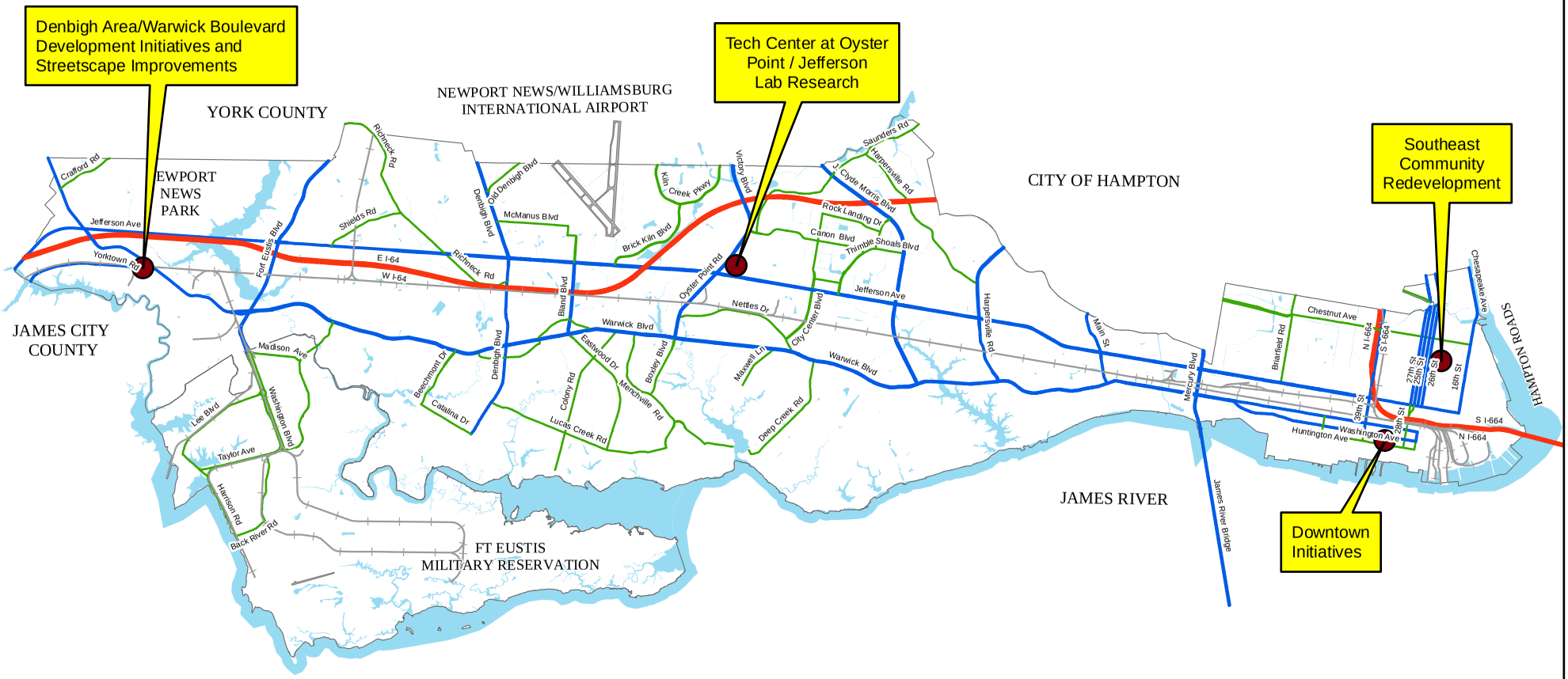
GENERAL FUND

COMMUNITY DEVELOPMENT

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Community Development



Citywide

Economic Development Projects

Legend

- Community Development

COMMUNITY DEVELOPMENT

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Economic Development Projects	$500,000	$0	$0	$0	$0	**$500,000**
Southeast Community Redevelopment	$260,000	$260,000	$270,000	$270,000	$280,000	**$1,340,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$760,000**	**$260,000**	**$270,000**	**$270,000**	**$280,000**	**$1,840,000**
GEN OBLIGATION BOND (GOB)						
Denbigh Area/Warwick Boulevard Development Initiatives and Streetscape Improvements	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
Economic Development Projects	$0	$750,000	$750,000	$750,000	$1,000,000	**$3,250,000**
Seafood Industrial Park Bulkhead Repair Program	$1,250,000	$0	$0	$0	$0	**$1,250,000**
Southeast Community Redevelopment	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	**$7,500,000**
Tech Center at Oyster Point / Jefferson Lab Research	$13,000,000	$14,000,000	$2,250,000	$2,800,000	$2,800,000	**$34,850,000**
*Downtown Initiatives	$0	$500,000	$700,000	$1,000,000	$1,000,000	**$3,200,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$16,250,000**	**$17,250,000**	**$5,700,000**	**$6,550,000**	**$6,800,000**	**$52,550,000**
GRANT FUNDING						
Seafood Industrial Park Bulkhead Repair Program	$250,000	$0	$0	$0	$0	**$250,000**
Tech Center at Oyster Point / Jefferson Lab Research	$3,750,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	**$7,750,000**
TOTAL GRANT FUNDING:	**$4,000,000**	**$1,000,000**	**$1,000,000**	**$1,000,000**	**$1,000,000**	**$8,000,000**
COMMUNITY DEVELOPMENT TOTAL:	***$21,010,000***	***$18,510,000***	***$6,970,000***	***$7,820,000***	***$8,080,000***	***$62,390,000***

COMMUNITY DEVELOPMENT

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Southeast Community Redevelopment	$260,000	$270,000	$270,000	$280,000	$280,000	**$1,360,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$260,000**	**$270,000**	**$270,000**	**$280,000**	**$280,000**	**$1,360,000**
GEN OBLIGATION BOND (GOB)						
Denbigh Area/Warwick Boulevard Development Initiatives and Streetscape Improvements	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
Downtown Initiatives	$500,000	$700,000	$1,000,000	$1,000,000	$1,500,000	**$4,700,000**
Economic Development Projects	$750,000	$750,000	$750,000	$1,000,000	$1,000,000	**$4,250,000**
Southeast Community Redevelopment	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$2,200,000	**$8,200,000**
Tech Center at Oyster Point / Jefferson Lab Research	$14,000,000	$2,250,000	$3,400,000	$2,500,000	$1,500,000	**$23,650,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$17,250,000**	**$5,700,000**	**$7,150,000**	**$6,500,000**	**$6,700,000**	**$43,300,000**
GRANT FUNDING						
Tech Center at Oyster Point / Jefferson Lab Research	$1,000,000	$1,000,000	$2,900,000	$2,500,000	$1,000,000	**$8,400,000**
TOTAL GRANT FUNDING:	**$1,000,000**	**$1,000,000**	**$2,900,000**	**$2,500,000**	**$1,000,000**	**$8,400,000**
COMMUNITY DEVELOPMENT TOTAL:	***$18,510,000***	***$6,970,000***	***$10,320,000***	***$9,280,000***	***$7,980,000***	***$53,060,000***

COMMUNITY DEVELOPMENT CAPITAL PROJECT

PROJECT NAME:	Denbigh Area/Warwick Boulevard Development Initiatives and Streetscape Improvements
DEPARTMENT:	Development / Planning
CONTACT PERSON:	Florence Kingston / Sheila McAllister
PHONE:	9268428/9268761
PROJECT LOCATION:	Warwick Blvd and Immediate Vicinity from Northern City Limit to Oyster Point Rd

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	X
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Community Development
TOTAL ESTIMATED COST:	$2,500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project will involve strategic property acquisitions, to complement initial acquisitions, within the target area and major aesthetic infrastructure upgrades (landscape, streetscape, enhanced neighborhood entrances, traffic control, utilities, etc.) along the corridor from Menchville Road to Fort Eustis Boulevard. Dynamic property assembly activities through voluntary sales and repackaging of properties continue to be pursued to attract major new investments. Beautification and streetscape upgrades will send the message that the City is committed to redevelopment efforts in the area.

Planned efforts are consistent with recommendations of the Upper Warwick Boulevard Corridor Study.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Reserve Fund						**-**
Gen Obligation Bond (GOB)	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
Funding Source Total:	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$2,500,000**
PROJECT COST:						
Construction						**-**
Planning/Design						**-**
Site Acquisition	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
Project Total:	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$2,500,000**

IMPACT ON OPERATING BUDGET: The upkeep of the infrastructure upgrades will involve landscape maintenance. Landscape maintenance includes regular grass cutting, and trash and debris removal.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reinvesting in these initiatives will improve an entrance to Newport News by creating an identity and sense of place for the Denbigh area. It will also encourage the expansion of existing businesses and encourage new investments which will increase the local tax base. Aesthetic improvements to the streetscape will create a pleasant pedestrian landscape for residents and visitors. Residential neighborhood entrance enhancements and identification upgrades will add to the cumulative reinvestment in this important part of Newport News.

COMMUNITY DEVELOPMENT CAPITAL PROJECT

PROJECT NAME:	Downtown Initiatives
DEPARTMENT:	Development
CONTACT PERSON:	Florence Kingston
PHONE:	926-8428
PROJECT LOCATION:	Traditional Downtown bounded by the James River, 52nd Street, CSX Corridor and the Newport News Marine Terminal

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	X
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Community Development
TOTAL ESTIMATED COST:	$4,700,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The Historic Downtown is emerging from a trough period with the completion of transformative projects that create new, positive pressures on underdeveloped properties and infrastructure. These funds support dynamic public action on land assembly, infrastructure and public amenities related to and in support of the Superblock development. Waterfront redevelopment extending north from Victory Landing Park through Christopher Newport Park, development and redevelopment in the vicinity of the Apprentice School, public-private partnerships connected with new hospitality, residential, commercial offices and retail, as well as other impactful positive enhancements to the Historic Downtown will be stimulated and supported.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$500,000	$700,000	$1,000,000	$1,000,000	$1,500,000	**$4,700,000**
Funding Source Total:	**$500,000**	**$700,000**	**$1,000,000**	**$1,000,000**	**$1,500,000**	**$4,700,000**
PROJECT COST:						
Construction	$100,000	$100,000	$500,000	$500,000	$900,000	**$2,100,000**
Other	$100,000	$100,000	$100,000	$100,000	$150,000	**$550,000**
Planning/Design	$100,000	$300,000	$200,000	$200,000	$200,000	**$1,000,000**
Site Acquisition	$200,000	$200,000	$200,000	$200,000	$250,000	**$1,050,000**
Project Total:	**$500,000**	**$700,000**	**$1,000,000**	**$1,000,000**	**$1,500,000**	**$4,700,000**

IMPACT ON OPERATING BUDGET: Dependent upon specific projects.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Through direct public investment, Downtown Initiatives will change a declining portion of the City in multiple ways. One of the most crucial aspects of the Downtown Initiatives project is the cultivation and promotion of a positive image of the City. The City will aggressively counter negative representations with direct marketing and public relation strategies aimed at creating a positive public perception. A vibrant downtown will encourage and attract private investments, create jobs, stimulate the local economy, increase property values and make the historic downtown more inviting to visitors. These initiatives will also expand opportunities for housing, entertainment and employment.

COMMUNITY DEVELOPMENT CAPITAL PROJECT

PROJECT NAME:	Economic Development Projects
DEPARTMENT:	Development / Economic Development Authority / Planning
CONTACT PERSON:	Florence Kingston/Sheila McAllister
PHONE:	9268428/9268761
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Community Development
TOTAL ESTIMATED COST:	$4,250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project recognizes the need to anticipate significant public investments in economic development projects throughout the City and affords the ability to respond to economic development opportunities in a dynamic development arena. Additionally, the City needs to anticipate future expenditures associated with specific projects, many of which are identified below, as well as matching grant opportunities, such as the Governor's Opportunity Fund (GOF), USEDA Transportation/Public Works Grants, Transportation Alternative Programs, Revenue Sharing, Industrialized Redevelopment Fund, and First Choice Neighborhoods for business attraction.

Expansion purposes include Denbigh Area Projects, Oyster Point Expansion (including infrastructure and studies), Copeland infrastructure improvements, Seafood Industrial Park capital improvement needs and requirements, City Center core infrastructure, Jefferson Center for Research and Technology infrastructure (including Tech Center at Oyster Point / Jefferson Lab Research-related infrastructure enhancements), Oakland Industrial Park infrastructure enhancements, Patrick Henry CommerCenter infrastructure improvements, strategic property acquisitions (Citywide), structured parking needs, and Southeast urban waterfront redevelopment.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget						**-**
Gen Obligation Bond (GOB)	$750,000	$750,000	$750,000	$1,000,000	$1,000,000	**$4,250,000**
Funding Source Total:	**$750,000**	**$750,000**	**$750,000**	**$1,000,000**	**$1,000,000**	**$4,250,000**
PROJECT COST:						
Construction	$500,000	$500,000	$500,000	$650,000	$650,000	**$2,800,000**
Planning/Design	$50,000	$50,000	$50,000	$100,000	$100,000	**$350,000**
Site Acquisition	$200,000	$200,000	$200,000	$250,000	$250,000	**$1,100,000**
Project Total:	**$750,000**	**$750,000**	**$750,000**	**$1,000,000**	**$1,000,000**	**$4,250,000**

IMPACT ON OPERATING BUDGET: Undetermined until specific projects identified.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Projects should contribute to making Newport News a better place to live and work, and enhance the City's profile in the region and the state. Measurable outcomes for economic development opportunities will include employment increases, attracting more private investments with associated long-term multiplier effects, tax and fee revenue increases for the City, among other measures of increased economic performance and tax base resiliency.

COMMUNITY DEVELOPMENT CAPITAL PROJECT

PROJECT NAME:	Southeast Community Redevelopment
DEPARTMENT:	NNRHA / Development / Planning
CONTACT PERSON:	Karen Wilds/Florence Kingston/Sheila McAllister
PHONE:	9282663/9268428
PROJECT LOCATION:	Southeast Community

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Community Development
TOTAL ESTIMATED COST:	$9,560,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Summary of sustainable Southeast Community development/redevelopment activity includes Brooks Crossing project implementation (South Police Precinct, grocery, commercial and residential components), general urban redevelopment, and the Redevelopment Services Contract (NNRHA leads Southeast Community property acquisition, relocation and demolition efforts related to the projects above and for the City's Flood Mitigation Assistance Program). Southeast Community Redevelopment efforts are targeted at the elimination of blight, stimulation of economic development and stabilization of neighborhoods that include survey of existing buildings, acquisition, demolition, relocation, infrastructure, rehabilitation, and other development expenses and program delivery. Emphasis areas include multi-family housing, commercial and retail in tandem with South Jefferson Corridor streetscape improvements, potential reinvestments in former Dickerson Courts and Harbor Homes sites and potential Chestnut Avenue rehabilitation projects.

Cash Capital component is related to services provided by NNRHA under the Redevelopment Services Contract.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$260,000	$270,000	$270,000	$280,000	$280,000	**$1,360,000**
Gen Obligation Bond (GOB)	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$2,200,000	**$8,200,000**
Funding Source Total:	**$1,760,000**	**$1,770,000**	**$1,770,000**	**$1,780,000**	**$2,480,000**	**$9,560,000**
PROJECT COST:						
Construction	$250,000	$250,000	$250,000	$250,000	$410,000	**$1,410,000**
Other	$550,000	$560,000	$560,000	$563,000	$990,000	**$3,223,000**
Planning/Design	$765,000	$765,000	$765,000	$771,000	$882,000	**$3,948,000**
Site Acquisition	$195,000	$195,000	$195,000	$196,000	$198,000	**$979,000**
Project Total:	**$1,760,000**	**$1,770,000**	**$1,770,000**	**$1,780,000**	**$2,480,000**	**$9,560,000**

IMPACT ON OPERATING BUDGET: Program delivery, including staffing and overhead, is budgeted in the NNRHA Redevelopment Services Contract and includes efforts associated with South Jefferson Park.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The continuation of public investments in the Southeast Community will improve the overall quality of life for citizens and visitors by creating a community where people can live, work and play. This is achieved by eliminating blight which will discourage the opportunity for crime to occur, creating jobs, improving and increasing the housing stock, increasing retail opportunities, and utilizing adaptive reuse of older buildings to help preserve the heritage and culture of the Southeast Community for generations to enjoy and appreciate.

COMMUNITY DEVELOPMENT CAPITAL PROJECT

PROJECT NAME:	Tech Center at Oyster Point / Jefferson Lab Research
DEPARTMENT:	Development
CONTACT PERSON:	Florence Kingston
PHONE:	9268428
PROJECT LOCATION:	Greater Oyster Point

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Community Development
TOTAL ESTIMATED COST:	$32,050,000
NEW PROJECT:	N

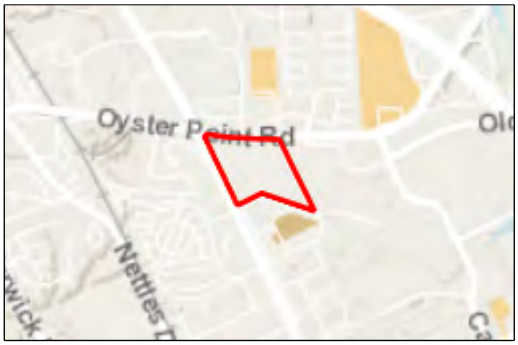
PROJECT DESCRIPTION and/or JUSTIFICATION: Several projects are contemplated in association with this project. Relocation of the School Division SCOT facility is necessary to allow for high-value reuse of its acreage and other publicly-owned parcels adjacent to Jefferson Lab and the emerging Tech Center development. An unsolicited PPEA proposal has been received by the City with cost figures currently exempted from disclosure under the Code of Virginia. Therefore, FY 2017 and FY 2018 figures submitted below are temporarily maintained at the same amounts in the Approved FY 2016 – FY2020 CIP. In addition, transportation and infrastructure improvements (including stormwater), site characterization studies, and other development capital requirements will remain necessary in this 5-year CIP cycle and beyond.

Importantly, Jefferson Lab and Virginia Tech/VT KnowledgeWorks are strategic partners in this initiative. There will be investments that leverage and support entrepreneurial development and commercialization of emerging technology and materials development borne of the Jefferson Lab accelerator facility and associated free electron laser technology, as well as emerging facilities and cutting-edge research and technology initiatives at the Jefferson Lab campus.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$14,000,000	$2,250,000	$3,400,000	$2,500,000	$1,500,000	**$23,650,000**
Grant Funding	$1,000,000	$1,000,000	$2,900,000	$2,500,000	$1,000,000	**$8,400,000**
Funding Source Total:	**$15,000,000**	**$3,250,000**	**$6,300,000**	**$5,000,000**	**$2,500,000**	**$32,050,000**
PROJECT COST:						
Construction	$13,700,000	$2,500,000	$5,000,000	$5,000,000	$2,000,000	**$28,200,000**
Other	$100,000	$600,000	$500,000		$500,000	**$1,700,000**
Planning/Design	$150,000	$150,000	$800,000			**$1,100,000**
Site Acquisition	$1,050,000					**$1,050,000**
Project Total:	**$15,000,000**	**$3,250,000**	**$6,300,000**	**$5,000,000**	**$2,500,000**	**$32,050,000**

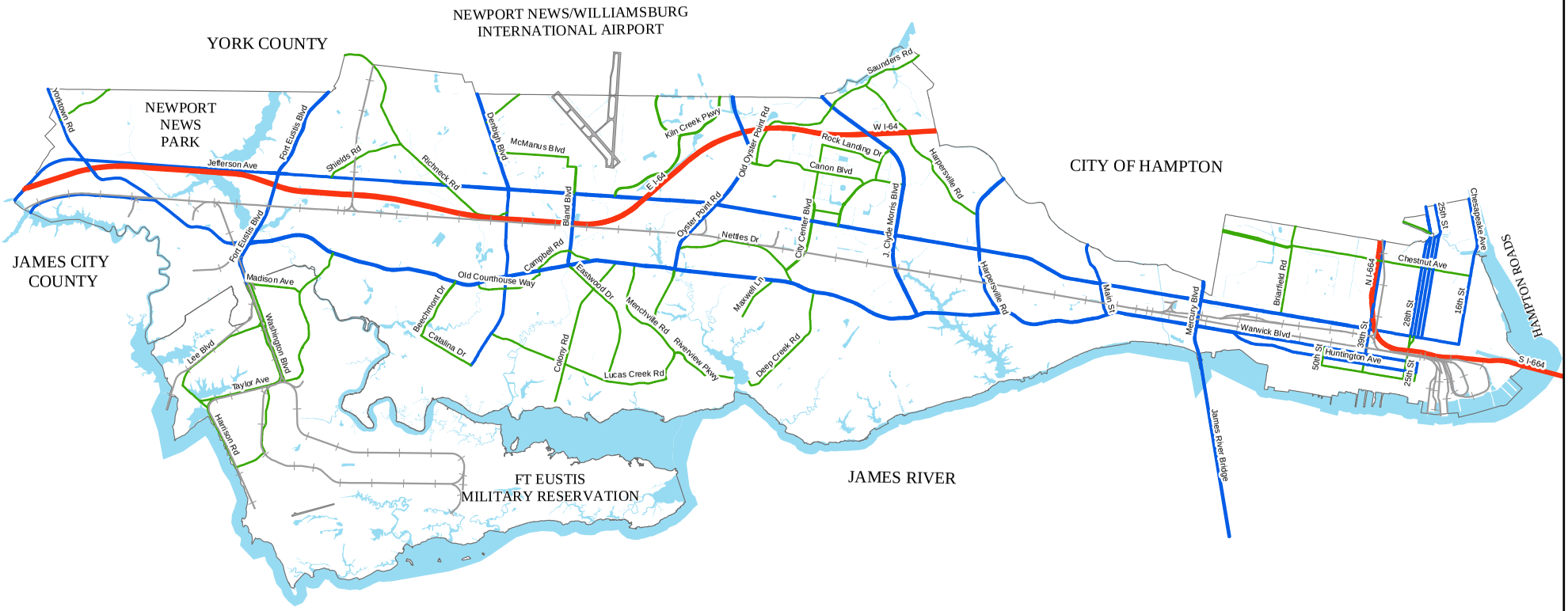
IMPACT ON OPERATING BUDGET: Maintenance and upkeep of public facilities constructed and installed will be needed at the completion of the project.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Newport News becomes a better place to live, work, play and shop as this project grows and enhances our profile in the region and beyond. Measurable outcomes for economic development opportunities will include economic diversification, high-wage employment increases, private investments and associated multiplier effects, tax and fee revenue increases for the City, technological/scientific advancements and spin-offs, and entrepreneurship/start-ups tied to those advancements, among a multitude of other measures of increased economic performance and tax base enhancements.



ENVIRONMENTAL

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Environmental



Citywide

Emergency Response / Environmental Remediation
HVAC System Environmental Assessment

ENVIRONMENTAL

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Emergency Response / Environmental Remediation	$75,000	$75,000	$75,000	$75,000	$75,000	**$375,000**
HVAC System Environmental Assessment	$150,000	$150,000	$150,000	$150,000	$150,000	**$750,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$225,000**	**$225,000**	**$225,000**	**$225,000**	**$225,000**	**$1,125,000**
GEN OBLIGATION BOND (GOB)						
Shoreline Stabilization	$0	$186,000	$384,000	$0	$0	**$570,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$0**	**$186,000**	**$384,000**	**$0**	**$0**	**$570,000**
ENVIRONMENTAL TOTAL:	***$225,000***	***$411,000***	***$609,000***	***$225,000***	***$225,000***	***$1,695,000***

ENVIRONMENTAL

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Emergency Response / Environmental Remediation	$75,000	$75,000	$75,000	$75,000	$75,000	**$375,000**
HVAC System Environmental Assessment	$150,000	$150,000	$150,000	$150,000	$150,000	**$750,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$225,000**	**$225,000**	**$225,000**	**$225,000**	**$225,000**	**$1,125,000**
ENVIRONMENTAL TOTAL:	***$225,000***	***$225,000***	***$225,000***	***$225,000***	***$225,000***	***$1,125,000***

ENVIRONMENTAL CAPITAL PROJECT

PROJECT NAME:	Emergency Response / Environmental Remediation		
DEPARTMENT:	Engineering / Public Works		
CONTACT PERSON:	Louis Bott/David Sinclair	**PHONE:**	9268661
PROJECT LOCATION:	Citywide		

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Environmental		
TOTAL ESTIMATED COST:	$375,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Funding will allow for emergency response and remediation on a variety of environmental issues that will likely include but not be limited to City buildings, stormwater infrastructure, and other public lands. Funding will allow for the reduction of hazards and impacts associated with unforeseen incidents or conditions that pose environmental and public safety risks.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$75,000	$75,000	$75,000	$75,000	$75,000	**$375,000**
Funding Source Total:	**$75,000**	**$75,000**	**$75,000**	**$75,000**	**$75,000**	**$375,000**
PROJECT COST:						
Construction	$75,000	$75,000	$75,000	$75,000	$75,000	**$375,000**
Project Total:	**$75,000**	**$75,000**	**$75,000**	**$75,000**	**$75,000**	**$375,000**

IMPACT ON OPERATING BUDGET: Minimal impact on operating budget.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Activities will minimize community and citizen exposure of the risks and costs associated with environmental hazards. Investments will improve the quality of life for our community and raises the level of environmental awareness in citizens. Efforts will also reduce on-site and off-site environmental liabilities and damages, promote an environmentally sustainable local government, and demonstrate commitment to the City's environmental policy.

ENVIRONMENTAL CAPITAL PROJECT

PROJECT NAME:	HVAC System Environmental Assessment
DEPARTMENT:	Public Works
CONTACT PERSON:	David Sinclair
PHONE:	9268661
PROJECT LOCATION:	Various facilities throughout the City

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Environmental
TOTAL ESTIMATED COST:	$750,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Activities will involve environmental assessment of City-owned building HVAC systems IAW ACR 2006 industry standard.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$150,000	$150,000	$150,000	$150,000	$150,000	**$750,000**
Funding Source Total:	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$750,000**
PROJECT COST:						
Planning/Design	$150,000	$150,000	$150,000	$150,000	$150,000	**$750,000**
Project Total:	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$750,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Efforts will minimize employee and citizen exposure to the risks and costs associated with poor indoor air quality. Additionally, investment will improve the quality of public spaces for our community, raise the level of environmental awareness in citizens and employees, promote an environmentally sustainable local government, and demonstrate commitment to safe and healthy public buildings/workplaces.

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COMMUNITY FACILITIES

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Nightingale Regional Air Ambulance Service	$30,000	$0	$0	$0	$0	**$30,000**
Peninsula Fine Arts Center (PFAC)	$125,000	$0	$0	$0	$0	**$125,000**
USS Monitor Center	$300,000	$0	$0	$0	$0	**$300,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$455,000**	**$0**	**$0**	**$0**	**$0**	**$455,000**
COMMUNITY FACILITIES TOTAL:	***$455,000***	***$0***	***$0***	***$0***	***$0***	***$455,000***

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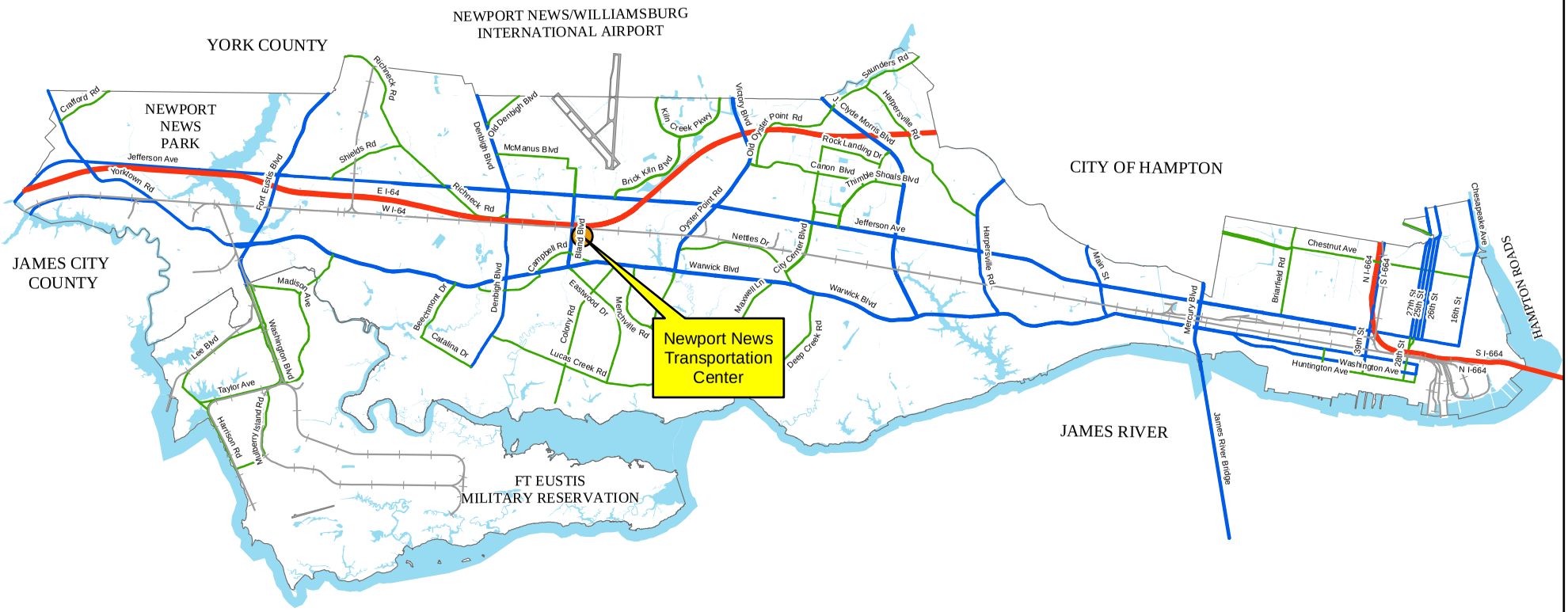
TRANSIT

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Transit



Citywide

One ACCESSIBLE City - HRT Bus Stop ADA Improvement Program
Bus Rapid Transit

Legend

- Transit

TRANSIT

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
GEN OBLIGATION BOND (GOB)						
Newport News Transportation Center	$495,000	$0	$0	$0	$0	**$495,000**
One ACCESSIBLE City - HRT Bus Stop ADA Improvement Program	$0	$46,250	$75,000	$75,000	$75,000	**$271,250**
TOTAL GEN OBLIGATION BOND (GOB):	**$495,000**	**$46,250**	**$75,000**	**$75,000**	**$75,000**	**$766,250**
GRANT FUNDING						
Newport News Transportation Center	$6,936,232	$26,500,000	$4,563,768	$0	$0	**$38,000,000**
TOTAL GRANT FUNDING:	**$6,936,232**	**$26,500,000**	**$4,563,768**	**$0**	**$0**	**$38,000,000**
TRANSIT TOTAL:	***$7,431,232***	***$26,546,250***	***$4,638,768***	***$75,000***	***$75,000***	***$38,766,250***

TRANSIT

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
One ACCESSIBLE City - HRT Bus Stop ADA Improvement Program	$46,250	$75,000	$75,000	$75,000	$95,950	**$367,200**
*Bus Rapid Transit	$100,000	$250,000	$0	$0	$0	**$350,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$146,250**	**$325,000**	**$75,000**	**$75,000**	**$95,950**	**$717,200**
GRANT FUNDING						
Newport News Transportation Center	$12,500,000	$11,563,768	$7,000,000	$0	$0	**$31,063,768**
*Bus Rapid Transit	$0	$250,000	$0	$0	$0	**$250,000**
TOTAL GRANT FUNDING:	**$12,500,000**	**$11,813,768**	**$7,000,000**	**$0**	**$0**	**$31,313,768**
TRANSIT TOTAL:	***$12,646,250***	***$12,138,768***	***$7,075,000***	***$75,000***	***$95,950***	***$32,030,968***

TRANSIT CAPITAL PROJECT

PROJECT NAME:	Bus Rapid Transit		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Bryan Stilley	**PHONE:**	926-8699
PROJECT LOCATION:	Citywide		

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Transit		
TOTAL ESTIMATED COST:	$600,000	**NEW PROJECT:**	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: Bus Rapid Transit (BRT) will provide a long term, high capacity mass transit system for the city. The system will provide regional mobility with connections to Southside Hampton Roads and Williamsburg Area Transit Authority (WATA). There is limited ability to expand the roadway network in the City. This system will provide a more efficient way to move people throughout the region and deliver a transportation alternative for the future.

Funding identified in FY 2017 and FY 2018 will support project planning efforts. Additional funding will be required in future capital plans, as the project total cost estimate is developed.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$100,000	$250,000				**$350,000**
Grant Funding		$250,000				**$250,000**
Funding Source Total:	**$100,000**	**$500,000**	**-**	**-**	**-**	**$600,000**
PROJECT COST:						
Planning/Design	$100,000	$500,000				**$600,000**
Project Total:	**$100,000**	**$500,000**	**-**	**-**	**-**	**$600,000**

IMPACT ON OPERATING BUDGET: Substantial operating funds will be required for HRT to provide bus service within the system.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: This project will provide a greater mobility for citizens without access to private transportation and provide increased development opportunities with improved transportation alternative.

TRANSIT CAPITAL PROJECT

PROJECT NAME:	Newport News Transportation Center
DEPARTMENT:	Engineering / Planning
CONTACT PERSON:	Vince Urbano/Sheila McAllister
PHONE:	9268694
PROJECT LOCATION:	500 Bland Blvd / potential future downtown access

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	**X**

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	**X**
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Transit
TOTAL ESTIMATED COST:	$31,063,768
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The Virginia Department of Rail and Public Transportation (DRPT) plans to bring enhanced Amtrak bus, taxi and future light rail service to Newport News as part of the Richmond to Hampton Roads Passenger Rail Draft Environmental Impact Study (DEIS). The existing Amtrak Station on 9304 Warwick Boulevard will need to be relocated and rebuilt as a multimodal facility at Bland Boulevard on 31 acres owned by the City (currently under alternative analysis) and a potential second Amtrak access point is planned for the future in downtown Newport News.

The City partnering with Amtrak, DRPT, and CSX will be responsible for building the stations. Congestion Mitigation and Air Quality (CMAQ) Grant funding has been programmed for the multi-modal station. DRPT and Amtrak require a train cleaning, storage facility and site for this project. This additional cost combined with track work and train turning increases the total project cost to $43 million dollars. Intercity Passenger Rail Operating Capitol (IPROC) funds in the amount of $20 million dollars have been granted to the project from DRPT.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)						**-**
Grant Funding	$12,500,000	$11,563,768	$7,000,000			**$31,063,768**
Other						**-**
Funding Source Total:	**$12,500,000**	**$11,563,768**	**$7,000,000**	**-**	**-**	**$31,063,768**
PROJECT COST:						
Construction	$10,886,150	$11,140,707	$7,000,000			**$29,026,857**
Internal Staff Cost						**-**
Other	$1,613,850	$423,061				**$2,036,911**
Planning/Design						**-**
Site Acquisition						**-**
Project Total:	**$12,500,000**	**$11,563,768**	**$7,000,000**	**-**	**-**	**$31,063,768**

IMPACT ON OPERATING BUDGET: Estimated land acquisition costs of $500,000 for the Sluice Mill Train storage site and other impacted residential properties for Waterline relocations.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The multimodal station will improve Amtrak service on the Peninsula, increase ridership, provide a station where riders will be exposed to the full service transit experience to include all modes of transit (taxi, bus, train, car), increase the ability to move from passenger trains to high speed rail, and the possibility of creating a city BRT (Bus Rapid Transit) system. Riders will have a convenient and comfortable facility to wait for trains. In addition, citizens will be able to move freely throughout the city without having to spend hours in traffic, thereby reducing congestion. Due to direct shuttle access, the multimodal station can be a catalyst for the future development of the Jefferson Avenue/Bland Boulevard corridor between the station and the airport, which will stimulate investment, expand the tax base and create jobs.

TRANSIT CAPITAL PROJECT

PROJECT NAME:	One ACCESSIBLE City - HRT Bus Stop ADA Improvement Program
DEPARTMENT:	Engineering
CONTACT PERSON:	David T. Wilkinson
PHONE:	(757) 926-8690
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Transit
TOTAL ESTIMATED COST:	$367,200
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The City of Newport News and Hampton Roads Transit seek to provide a framework for maintaining and developing bus stops that are easily identifiable, safe, and accessible. The One ACCESSIBLE City Transit Bus Stop ADA Improvement Program is the City's continuing effort to provide accessible bus stops for the disabled community, to ensure that everyone can physically access bus stops and the proper loading and unloading of passengers on buses. Through this effort, the City establishes a positive, effective and safe service for the entire Newport News community.

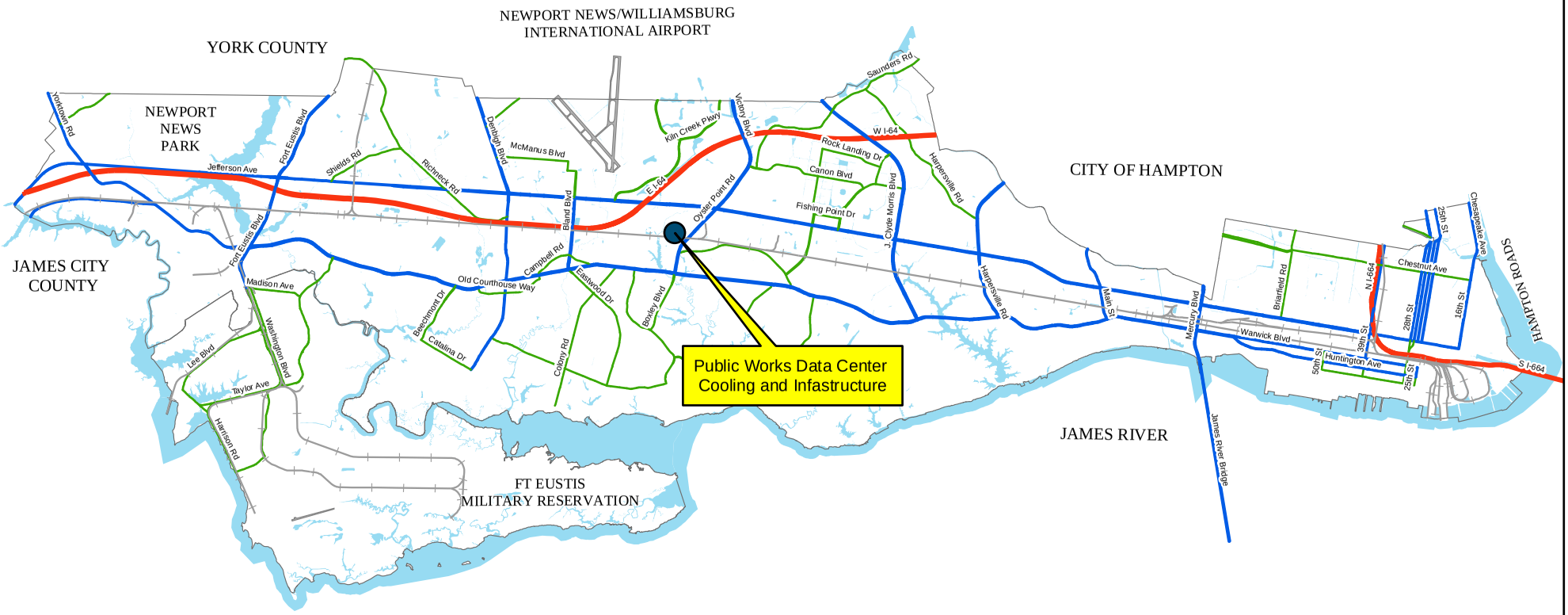
FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$46,250	$75,000	$75,000	$75,000	$95,950	**$367,200**
Gen Obligation Bond (GOB)						**-**
Grant Funding						**-**
Other						**-**
Funding Source Total:	**$46,250**	**$75,000**	**$75,000**	**$75,000**	**$95,950**	**$367,200**
PROJECT COST:						
Construction	$35,000	$61,430	$59,040	$56,580	$75,000	**$287,050**
Contingency	$3,750	$3,750	$3,750	$3,750	$3,750	**$18,750**
Internal Staff Cost	$5,250	$5,250	$5,250	$5,250	$5,250	**$26,250**
Other	$2,250	$4,570	$6,960	$9,420	$11,950	**$35,150**
Project Total:	**$46,250**	**$75,000**	**$75,000**	**$75,000**	**$95,950**	**$367,200**

IMPACT ON OPERATING BUDGET: New sidewalk enhancements will require minimal maintenance initially, but over time maintenance costs must be addressed in future operating budgets.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: This effort will improve accessibility to transit stops and reduce the danger of associated with waiting in or alongside roadways or traversing a travel lane of a major roadway to get to a transit stop.

EQUIPMENT

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Equipment



Citywide

Mobile Digital Communicator (MDC) Replacement
Critical Cardiac Care Equipment Update
Fire Apparatus Capital Purchases
Fire Department Bomb Squad - Bomb Robot Replacement
Self Contained Breathing Apparatus – Bottle Replacement
City Hall IT Data Center Environmental Renovation
Voice over IP (Upgraded Phone System)

EQUIPMENT

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Fire Apparatus Capital Purchases	$910,000	$2,140,324	$1,020,000	$910,000	$0	**$4,980,324**
Mobile Digital Communicator (MDC) Replacement	$250,000	$400,000	$500,000	$0	$0	**$1,150,000**
*Critical Cardiac Care Equipment Update	$0	$0	$660,000	$0	$0	**$660,000**
*Fire Department Bomb Squad - Bomb Robot Replacement	$0	$0	$250,000	$0	$0	**$250,000**
*Self Contained Breathing Apparatus – Bottle Replacement	$0	$0	$0	$0	$1,700,000	**$1,700,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$1,160,000**	**$2,540,324**	**$2,430,000**	**$910,000**	**$1,700,000**	**$8,740,324**
EQUIPMENT TOTAL:	***$1,160,000***	***$2,540,324***	***$2,430,000***	***$910,000***	***$1,700,000***	***$8,740,324***

EQUIPMENT

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Critical Cardiac Care Equipment Update	$0	$808,500	$0	$0	$0	**$808,500**
Fire Apparatus Capital Purchases	$2,140,000	$1,020,000	$910,000	$300,000	$800,000	**$5,170,000**
Mobile Digital Communicator (MDC) Replacement	$250,000	$250,000	$250,000	$250,000	$250,000	**$1,250,000**
Self-Contained Breathing Apparatus – Bottle Replacement	$0	$0	$600,000	$0	$1,100,000	**$1,700,000**
*City Hall IT Data Center Environmental Renovation	$0	$650,000	$650,000	$0	$0	**$1,300,000**
*Public Works Data Center and Cooling Infrastructure Project	$0	$0	$275,000	$180,000	$140,000	**$595,000**
*Voice over IP (Upgraded Phone System)	$300,000	$400,000	$400,000	$500,000	$500,000	**$2,100,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$2,690,000**	**$3,128,500**	**$3,085,000**	**$1,230,000**	**$2,790,000**	**$12,923,500**
GRANT FUNDING						
Fire Department Bomb Squad - Bomb Robot Replacement	$0	$250,000	$0	$0	$0	**$250,000**
TOTAL GRANT FUNDING:	**$0**	**$250,000**	**$0**	**$0**	**$0**	**$250,000**
EQUIPMENT TOTAL:	***$2,690,000***	***$3,378,500***	***$3,085,000***	***$1,230,000***	***$2,790,000***	***$13,173,500***

EQUIPMENT CAPITAL PROJECT

PROJECT NAME:	City Hall IT Data Center Environmental Renovation
DEPARTMENT:	Information Technology
CONTACT PERSON:	Charles Campbell
PHONE:	926-1779
PROJECT LOCATION:	City Hall - 5th Floor Data Center

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	**X**

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	**X**
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Equipment
TOTAL ESTIMATED COST:	$1,300,000
NEW PROJECT:	Y

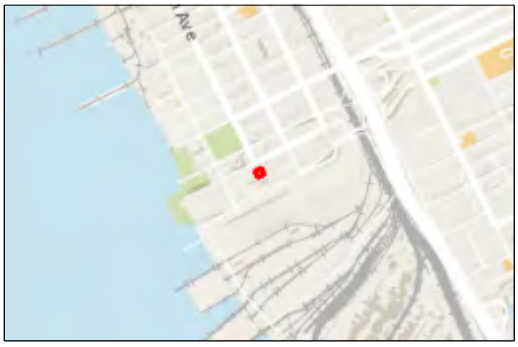
PROJECT DESCRIPTION and/or JUSTIFICATION: Renovation of the current air conditioning system in the Data Center with a fully functional environmental system including the necessary infrastructure and redundancy to maintain the integrity of a critical network. Upon completion, the City will have redundant cooling utilities serving redundant units in the 5th floor IT Data Center.

Scope:
• Provide support services and engineering required to provide a comprehensive environmental system design, as well as include stamped drawings as required for all proposed work.
• Collaborate with necessary City departments (Engineering, Information Technology, and Public Works, etc.) to design a functional room layout to best serve the City's needs.
• Design a functional system with a redundant strategy for utilities as well as equipment.
• Provide professional project management throughout design and implementation of primary and backup systems.
• Current budget value is based upon design and installation of:
  o A chilled water utility located in the Penthouse area serving the 5th floor IT room (primary environmental utility)
  o New environmental units to be installed in the 5th floor IT room.
  o Redundant environmental units to be installed in the 5th floor IT room.
  o New chilled water piping system between Penthouse and 5th floor IT room.
  o New condenser water system (secondary utility) serving the 5th floor IT environmental unit internal backup cooling system

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$650,000	$650,000			**$1,300,000**
Funding Source Total:	**-**	**$650,000**	**$650,000**	**-**	**-**	**$1,300,000**
PROJECT COST:						
Other		$650,000	$650,000			**$1,300,000**
Project Total:	**-**	**$650,000**	**$650,000**	**-**	**-**	**$1,300,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The additional environment system will be more efficient and will provide redundancy to support critical IT assets.



EQUIPMENT CAPITAL PROJECT

PROJECT NAME:	Critical Cardiac Care Equipment Update
DEPARTMENT:	Fire
CONTACT PERSON:	J. Douglas Carper II
PHONE:	7579268751
PROJECT LOCATION:	

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Equipment
TOTAL ESTIMATED COST:	$808,500
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project will replace/upgrade EMS Cardiac monitor/defibrillators from Lifepak 12 to Lifepak 15. Replacement/upgrade of the ten year old units will ensure that we maintain compliance with state EMS protocols and procedures and that we utilize the most advanced technology available to provide our patients the best chance for a successful outcome. Technology and procedures are ever changing and improving. Our current units will no longer be supported by the manufacturer. It is necessary to replace our existing units to ensure that we are providing and utilizing the most current lifesaving equipment available. Failure to upgrade will result in non-compliance with some local, state and regional protocols for both cardiac and stroke events.

Effort includes the purchase of 22 Lifepak 15 units at the cost of $36,750 each. The estimated cost includes ancillary capabilities and equipment consistent with the current devices and includes software and software upgrades over a defined period of time. Consistent with the past purchase of major equipment enhancements, the upgrade of Lifepak units should occur all at once to ensure consistency of equipment across all medic units.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$808,500				**$808,500**
Funding Source Total:	**-**	**$808,500**	**-**	**-**	**-**	**$808,500**
PROJECT COST:						
Other		$808,500				**$808,500**
Project Total:	**-**	**$808,500**	**-**	**-**	**-**	**$808,500**

IMPACT ON OPERATING BUDGET: Newport News Fire Department will continue to identify and pursue financial assistance through grant funding opportunities.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Lifepak 15 defibrillators are a critical piece of emergency medical service equipment. These units have a serviceable life of approximately ten years. Technological advancements for this electronic equipment often outpaces serviceable life span and older models usually are no longer supported by the manufacturers. The upgraded Lifepak 15 incorporates upgraded and enhanced hardware and software, providing cardiac and stroke patients with the best possible chance for survival. Additionally, the updated equipment ensures our agencies are in compliance with local, regional, and state protocols for both stroke and cardiac events.

EQUIPMENT CAPITAL PROJECT

PROJECT NAME:	Fire Apparatus Capital Purchases
DEPARTMENT:	Fire
CONTACT PERSON:	J. Douglas Carper II
PHONE:	7579268751
PROJECT LOCATION:	N/A

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Equipment
TOTAL ESTIMATED COST:	$5,170,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The Fire Department, in conjunction with Vehicle and Equipment Services, has established a life cycle replacement plan for front line and reserve apparatus. Based on this plan, it is anticipated that several assets will require replacement during the next 5-year period. The Fire Department makes a concerted effort to purchase from existing contracts and pursues cost reduction strategies by acquiring demo units and other opportunities. Current pricing for apparatus is shown below:

Engine $615,000
Ladder Truck $960,000
Brush Truck $200,000
Tower Platform $1,200,000
Heavy Rescue $660,000

Recent apparatus purchases include:

2011 2 Engines, 1 Ladder
2012 1 Engine, 1 Ladder, Brush / Service Unit
2013 1 Engine, 1 Tower
2014 2 Engine
2015 2 Rescue

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$2,140,000	$1,020,000	$910,000	$300,000	$800,000	**$5,170,000**
Funding Source Total:	**$2,140,000**	**$1,020,000**	**$910,000**	**$300,000**	**$800,000**	**$5,170,000**
PROJECT COST:						
Other	$2,140,000	$1,020,000	$910,000	$300,000	$800,000	**$5,170,000**
Project Total:	**$2,140,000**	**$1,020,000**	**$910,000**	**$300,000**	**$800,000**	**$5,170,000**

IMPACT ON OPERATING BUDGET: The ability to maintain an apparatus replacement plan will ensure that equipment is operationally safe for employees, capable of meeting the increasing daily mission of the department, and reduce maintenance costs. Moving the replaced frontline apparatus into reserve status ensures a reliable and stable fleet of back up apparatus, providing surge and backfill capacity, while reducing down time and increasing unit availability to meet an increasing demand for service. Maintaining apparatus in reserve status also extends the useful life of the apparatus while maintaining resale value. This plan was developed in collaboration with VES and is a supported request.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Fire Apparatus has a projected serviceable front line life span of approximately fifteen years. By instituting a life cycle replacement plan we are able to more efficiently plan for apparatus replacement. This results in cost efficiencies through identifying and sharing purchase contracts, experiencing cost savings through pre-delivery purchase discounts and providing adequate time to research and evaluate demo models. Ultimately, the inventory of apparatus will experience fewer repairs and less frequent down time, which increases unit availability and efficiency.

EQUIPMENT CAPITAL PROJECT

PROJECT NAME:	Fire Department Bomb Squad - Bomb Robot Replacement
DEPARTMENT:	Fire
CONTACT PERSON:	J. Douglas Carper II
PHONE:	7579268751
PROJECT LOCATION:	

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Equipment
TOTAL ESTIMATED COST:	$250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project requests funding to purchase an ANDROS F6B Bomb Robot. This robot will replace the F6A model was acquired in 2001 and is due for replacement to ensure reliability and expand functional capacity. The F6A was purchased in the wake of the 911 terrorist attacks with direct funding from cash capital and has served as our primary front line operational asset for explosive ordinance responses. This unit represents the versatility needed in an urban/sub-urban environment to adequately respond to and mitigate explosive ordinance/IED/VBIED/RDD related incidents.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget						**-**
Grant Funding		$250,000				**$250,000**
Funding Source Total:	**-**	**$250,000**	**-**	**-**	**-**	**$250,000**
PROJECT COST:						
Other		$250,000				**$250,000**
Project Total:	**-**	**$250,000**	**-**	**-**	**-**	**$250,000**

IMPACT ON OPERATING BUDGET: The results of this project will be measured in the sustained ability to provide first line defense within the City of Newport News and throughout the Hampton Roads region against the threat of IED, RDD, and CBRNE devices. The Battalion Chief – Special Operations, in conjunction with the Fire Chief, will establish a long term sustainability plan to ensure that the EOD capabilities of the Newport News Fire Department Bomb Team remain realistic, well-planned, and financially viable. Ongoing maintenance and repair will be incorporated into the Fire Department general operating budget.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The Newport News Bomb Team is the first line of response and defense for incidents involving suspected explosive devices, IED's, VBIED's and RDD's on the Virginia Peninsula. The team is capable of deploying 24 hours a day, seven days a week. As the only civilian team located on the Virginia Peninsula, the Newport News Bomb Team also participates as a regional member of the Hampton Roads Regional Metropolitan Bomb Squad (HRRMBS) in a regionally cooperative effort to protect life, property, and critical infrastructure throughout the Hampton Roads region. The benefit of this asset provides an additional layer of safety for the communities that we serve.

EQUIPMENT CAPITAL PROJECT

PROJECT NAME:	Mobile Digital Communicator (MDC) Replacement
DEPARTMENT:	Police
CONTACT PERSON:	Lillian Taylor
PHONE:	928-4377
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Equipment
TOTAL ESTIMATED COST:	$1,250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project provided funding for the replacement of Mobile Digital Communicator (MDC) and MDC tablets. The Police Department currently has an inventory of 336 MDCs, of which 245 should be replaced as soon as possible. In car MDCs have been replaced with tablets at $3,100 per unit.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$250,000	$250,000	$250,000	$250,000	$250,000	**$1,250,000**
Funding Source Total:	**$250,000**	**$250,000**	**$250,000**	**$250,000**	**$250,000**	**$1,250,000**
PROJECT COST:						
Other	$250,000	$250,000	$250,000	$250,000	$250,000	**$1,250,000**
Project Total:	**$250,000**	**$250,000**	**$250,000**	**$250,000**	**$250,000**	**$1,250,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: As a result of the project, officer safety and proper response to calls for service from the public will be improved.

EQUIPMENT CAPITAL PROJECT

PROJECT NAME:	Public Works Data Center and Cooling Infrastructure Project
DEPARTMENT:	Public Works
CONTACT PERSON:	Kirstin Platt
PHONE:	757-269-2720
PROJECT LOCATION:	Department of Public Works

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Equipment
TOTAL ESTIMATED COST:	$595,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: In addition to supporting Public Works operational activities, the Data Center at Public Works provides redundancy in equipment and networks for City Hall. The Data Center at Public Works is in need of additional cooling capabilities and infrastructure to continue to support all systems.

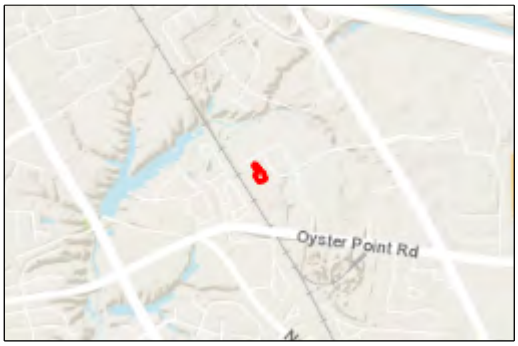
FY17 - 10 ton Air Rooftop Unit (Cool air to ensure network servers do not overheat and malfunction) - $125,000
FY17 - Electrical Support (Labor and Installation of Air Handling Unit) - $125,000
FY17 - Networking Equipment (Necessary Networking Equipment for Barracuda and Cybernetics Storage Devices) - $5,000
FY17 - Redundant HVAC Unit (Recommended during installation of 10 ton air rooftop unit) - $20,000
FY17 Total - $275,000

FY18 - Barracuda 1090 Network Storage Units (1 of 2 units: Support changes in real-time data, storage of data from streaming video such as the City's DSX Security and Network Camera system) - $140,000
FY18 - Cybernetics iSan Storage Device with 32 TB of storage (To support storage of mandated EPA permit data, FEMA requirements, APWA projects, and other data that is required to be housed long term or indefinitely. Supports programmatic requirements of trash collection, street maintenance, wastewater pumping stations, storm water pumping stations and Emergency Management) - $30,000
FY18 - Licensing (Necessary Licensing for Barracuda and Cybernetics Storage Devices) - $10,000
FY18 Total - $180,000

FY19 - Barracuda 1090 Network Storage Units (2 of 2 units @ 140,000 each: Support changes in real-time data, storage of data from streaming video such as the City's DSX Security and Network Camera system) - $140,000
FY19 Total - $140,000

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget			$275,000	$180,000	$140,000	**$595,000**
Funding Source Total:	**-**	**-**	**$275,000**	**$180,000**	**$140,000**	**$595,000**
PROJECT COST:						
Other			$275,000	$180,000	$140,000	**$595,000**
Project Total:	**-**	**-**	**$275,000**	**$180,000**	**$140,000**	**$595,000**

IMPACT ON OPERATING BUDGET: N/A



ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The added cooling system will ensure that vital City infrastructure and systems can remain online in the event of any emergency or cooling failure, as well as meeting the current cooling requirements. Currently, there are systems and services that would have to be shut down in order to host an emergency server in the event that City Hall goes offline. The added storage and backup devices will add redundancy to the City's network and allow us to perform as a backup site to a larger degree with available resources if City Hall should go offline. This equipment will provide proper support for our infrastructure improvements that are already underway, as well as the ability to backup this data properly.

Planning ahead and staying on top of current technologies will help us prevent a cataclysmic situation that could result in data loss, system failure and/or an overall inability to provide support to citizens in the event of an emergency. Many of the systems and software housed at Public Works, such as CityWorks, IP Camera systems, SCADA, and Win DSX Card access control, directly affect the public and or our ability to provide services to our citizens.

EQUIPMENT CAPITAL PROJECT

PROJECT NAME:	Self-Contained Breathing Apparatus – Bottle Replacement
DEPARTMENT:	Fire
CONTACT PERSON:	J. Douglas Carper II
PHONE:	7579268751
PROJECT LOCATION:	N/A

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	**X**

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	**X**
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Equipment
TOTAL ESTIMATED COST:	$1,700,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Self-Contained Breathing Apparatus (SCBA) units were replaced in 2004 with the assistance of federal grant funding. SCBAs have a serviceable life span of two NFPA Life Cycles (10 years). The Fire Department completed replacement of the stock of harnesses and upgraded Personal Alerting Systems (PAS) in 2013. This investment ensures that harnesses will be compliant until FY 2023.

The life span of the SCBA cylinders is 15 years from date of manufacture. The SCBA bottles currently in use were manufactured in 2004. New NFPA standards include enhanced safety standards for construction and operation of the SCBA units, which includes Low Air Alarming at 1/3 cylinder capacity. Our current SCBAs alarm at 1/4 of cylinder capacity. The inventory of SCBA bottles will expire in 2019. The normal replacement practice for SCBAs by other departments is to replace them when the cylinders need replacing. By using this time frame, the cylinders will need to be changed out in 2019. The approximate cost of cylinder replacement is $600,000. Total SCBA replacement would amount to approximately $1,700,000 if harnesses are included in the purchase quote.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget			$600,000		$1,100,000	**$1,700,000**
Funding Source Total:	**-**	**-**	**$600,000**	**-**	**$1,100,000**	**$1,700,000**
PROJECT COST:						
Other			$600,000		$1,100,000	**$1,700,000**
Project Total:	**-**	**-**	**$600,000**	**-**	**$1,100,000**	**$1,700,000**

IMPACT ON OPERATING BUDGET: Replacement of Self Contained Breathing Apparatus is critical to ensure that City firefighters have the proper personal protective equipment to allows them to work as safely as possible in hazardous environments. Requiring firefighting personnel to utilize outdated equipment places them in greater risk for their personal safety and results in a significant potential liability for the city.

A key critical factor in deciding when to replace the units is the exchange or resale value of the SCBAs, which ultimately contributes to significant cost savings to the overall replacement program. Replacing only the cylinders will extend the serviceable life of the individual units. The harnesses would then need to be replaced in FY 2022 at a projected cost of $1,500,000. The department's recommendation is to modify the current approved CIP request by purchasing SCBA cylinders in FY 2019 at a cost of $600,000 and to move the purchase of the SCBA harnesses to FY 2021 at a cost of $1,100,000.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: A Self-Contained Breathing Apparatus is a critical piece of safety equipment for our fire service personnel. Ensuring that our firefighters are equipped with safe, reliable, and NFPA-compliant equipment reduces the risk of harm for our personnel and liability associated with non-compliance.

EQUIPMENT CAPITAL PROJECT

PROJECT NAME:	Voice over IP (Upgraded Phone System)
DEPARTMENT:	Information Technology
CONTACT PERSON:	Andy Stein
PHONE:	7579263776
PROJECT LOCATION:	City Hall

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	**X**

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Equipment
TOTAL ESTIMATED COST:	$2,100,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: This project will complete the migration to Voice over IP technology and will modernize the City's telephony infrastructure. The current telephone system is voice-only with voice-only features that include call-forwarding, voicemail, and call transfer. The back office technology that supports this phone system is aging with some components nearing 20 years in service. Additionally, there are redundant components at a number of City buildings that are necessary to ensure a level of resilience in case of outages in other buildings. These redundant components include phone switches, additional Verizon lines and interfaces, and data/phone closet punch blocks/racks support infrastructure. Each redundant component imposes additional annual maintenance costs, as well as potential points of failure as the equipment ages.

VoIP is primarily server-based with a dependence on the City's data network. This system will reuse some of the existing digital phone system back-end technology while expanding the use of the City's municipal fiber network. The use of VoIP to replace the older style phone system will allow the City to adopt a newer technology called unified communications that embodies voice, data, digital presence, call hunting (call me on a pre-arranged list of phone numbers) and a host of other features which are included in the 311 system. Additionally, this effort will leverage and build on the unified communications portion of the back-end 311 technology rather than introduce another technology to contend with in the future.

Migration Plan
FY 2017 - City Warehouse, Public Works, EOC, and additional City sites
FY 2018 - Human Services, Police HQ, City Center, Deshazor
FY 2019 - City Hall

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$300,000	$400,000	$400,000	$500,000	$500,000	**$2,100,000**
Funding Source Total:	**$300,000**	**$400,000**	**$400,000**	**$500,000**	**$500,000**	**$2,100,000**
PROJECT COST:						
Construction	$300,000	$400,000	$400,000	$500,000	$500,000	**$2,100,000**
Project Total:	**$300,000**	**$400,000**	**$400,000**	**$500,000**	**$500,000**	**$2,100,000**

IMPACT ON OPERATING BUDGET: The current telephony budget will remain largely unchanged during implementation, but overall telephony costs will increase 50% - 75%. This increase is driven by the need to maintain and operate the current phone system while the migration to VoIP is phased in. During migration, it is anticipated that both the new and old telephony systems will be operational to ensure the availability of telephone service. Once implementation is complete and the current digital phone system has been replaced and removed, costs are anticipated to fall back to current levels of expenditure.

Additionally, it is anticipated that costs will decrease in the out-years due to decreasing server/infrastructure costs, decreased reliance on specialized telephony maintenance expertise, and a more consolidated technology environment with redundancy and resiliency and but with fewer points of presence and less redundant infrastructure. Cost savings, if any, are unknown at this time. Decision-makers should be aware that the primary benefit of this project is not cost savings but rather a modernization of the City's phone system to increase productivity.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES:

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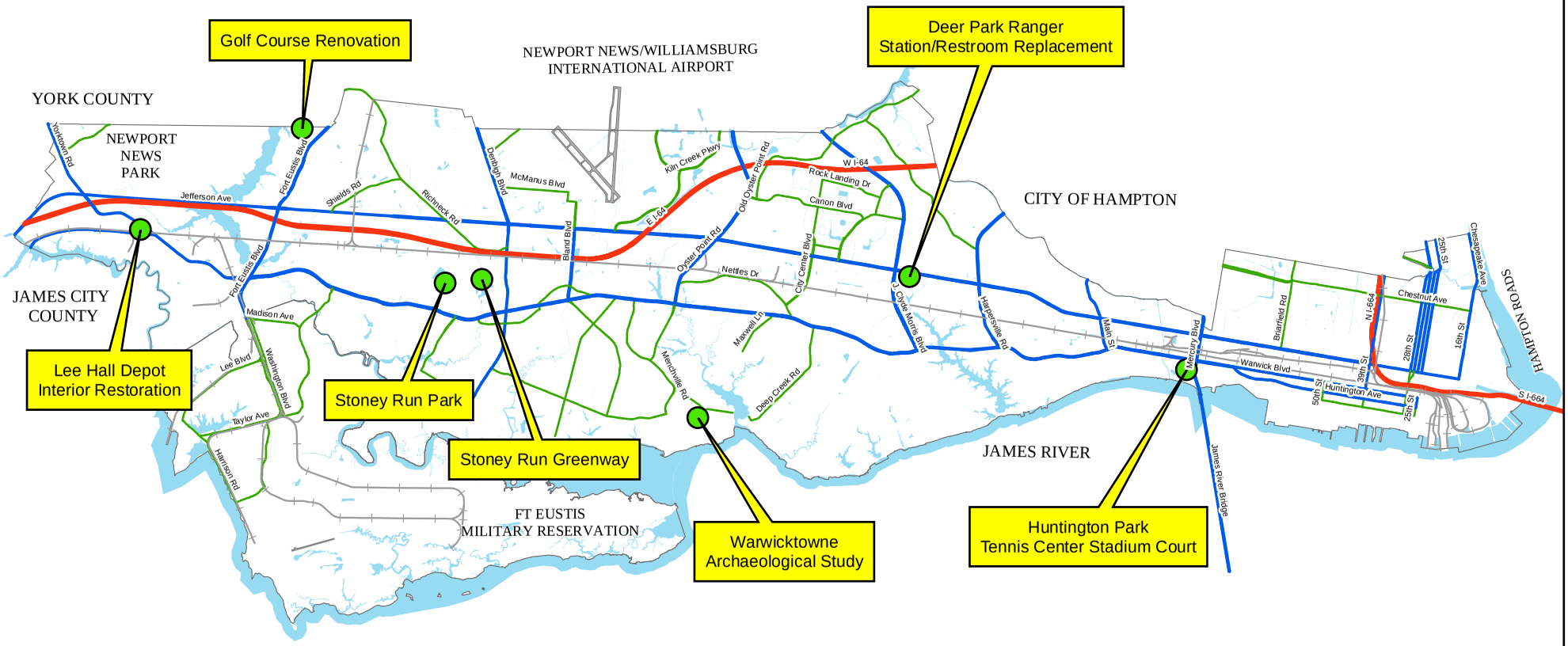
PARKS

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Parks and Recreation



Citywide

Historic Preservation
Park Facilities
Public Landscaping
Recreation Facilities
Boat Ramp & Marina Dredging
Park Roadway Paving & Improvements

Legend

Parks and Recreation

PARKS AND RECREATION

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Historic Preservation	$120,000	$120,000	$120,000	$125,000	$125,000	**$610,000**
Public Landscaping	$125,000	$125,000	$125,000	$150,000	$150,000	**$675,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$245,000**	**$245,000**	**$245,000**	**$275,000**	**$275,000**	**$1,285,000**
GEN OBLIGATION BOND (GOB)						
Golf Course Renovation	$0	$0	$0	$2,000,000	$2,000,000	**$4,000,000**
Huntington Park Tennis Center Stadium Court	$0	$0	$0	$195,000	$0	**$195,000**
Park Facilities	$300,000	$400,000	$400,000	$400,000	$420,000	**$1,920,000**
Recreation Facilities	$350,000	$350,000	$350,000	$350,000	$385,000	**$1,785,000**
Stoney Run Greenway	$0	$0	$0	$0	$174,900	**$174,900**
Stoney Run Park	$0	$0	$870,000	$1,200,000	$525,000	**$2,595,000**
*Lee Hall Depot - Interior Restoration	$0	$0	$0	$20,000	$20,000	**$40,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$650,000**	**$750,000**	**$1,620,000**	**$4,165,000**	**$3,524,900**	**$10,709,900**
GRANT FUNDING						
Historic Preservation	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
*Lee Hall Depot - Interior Restoration	$180,000	$180,000	$180,000	$0	$0	**$540,000**
TOTAL GRANT FUNDING:	**$380,000**	**$380,000**	**$380,000**	**$200,000**	**$200,000**	**$1,540,000**
OTHER						
Golf Course Pavilion	$670,000	$0	$0	$0	$0	**$670,000**
TOTAL OTHER:	**$670,000**	**$0**	**$0**	**$0**	**$0**	**$670,000**
PARKS AND RECREATION TOTAL:	***$1,945,000***	***$1,375,000***	***$2,245,000***	***$4,640,000***	***$3,999,900***	***$14,204,900***

PARKS AND RECREATION

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Historic Preservation	$120,000	$120,000	$125,000	$150,000	$150,000	**$665,000**
Huntington Park Tennis Center Stadium Court	$0	$0	$195,000	$0	$0	**$195,000**
Lee Hall Depot - Interior Restoration	$75,000	$75,000	$0	$0	$0	**$150,000**
Public Landscaping	$125,000	$125,000	$150,000	$150,000	$150,000	**$700,000**
*Warwicktowne Archaeological Study	$100,000	$100,000	$100,000	$0	$0	**$300,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$420,000**	**$420,000**	**$570,000**	**$300,000**	**$300,000**	**$2,010,000**
GEN OBLIGATION BOND (GOB)						
Golf Course Renovation	$0	$0	$2,000,000	$2,000,000	$0	**$4,000,000**
Park Facilities	$400,000	$400,000	$400,000	$420,000	$600,000	**$2,220,000**
Recreation Facilities	$350,000	$350,000	$350,000	$385,000	$385,000	**$1,820,000**
Stoney Run Greenway	$0	$0	$0	$0	$40,000	**$40,000**
Stoney Run Park	$0	$153,000	$906,000	$425,000	$1,435,000	**$2,919,000**
*Boat Ramp & Marina Dredging	$0	$575,000	$0	$0	$25,000	**$600,000**
*Deer Park Ranger Station/Restroom Replacement	$0	$0	$0	$0	$990,000	**$990,000**
*Park Roadway Paving & Improvements	$0	$142,000	$294,000	$100,000	$100,000	**$636,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$750,000**	**$1,620,000**	**$3,950,000**	**$3,330,000**	**$3,575,000**	**$13,225,000**
GRANT FUNDING						
Historic Preservation	$150,000	$150,000	$150,000	$200,000	$200,000	**$850,000**
Stoney Run Greenway	$0	$0	$0	$0	$160,000	**$160,000**
TOTAL GRANT FUNDING:	**$150,000**	**$150,000**	**$150,000**	**$200,000**	**$360,000**	**$1,010,000**
PARKS AND RECREATION TOTAL:	***$1,320,000***	***$2,190,000***	***$4,670,000***	***$3,830,000***	***$4,235,000***	***$16,245,000***

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Boat Ramp & Marina Dredging
DEPARTMENT:	Parks, Recreation & Tourism
CONTACT PERSON:	Michael Nealer
PHONE:	926-1400
PROJECT LOCATION:	Peterson's Yacht Basin, Leeward Marina & Huntington Park

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Parks and Recreation
TOTAL ESTIMATED COST:	$600,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: Three of the four City boat ramps/channels (Huntington, Leeward, Petersons) are in need of immediate dredging to facilitate continued unimpeded use by the boating public. Current conditions prevent boaters from launching and retrieving their watercraft at low tide resulting in backups at the locations during busy times. Complaints from boaters are now constant.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$575,000			$25,000	**$600,000**
Funding Source Total:	**-**	**$575,000**	**-**	**-**	**$25,000**	**$600,000**
PROJECT COST:						
Construction		$550,000				**$550,000**
Planning/Design		$25,000			$25,000	**$50,000**
Project Total:	**-**	**$575,000**	**-**	**-**	**$25,000**	**$600,000**

IMPACT ON OPERATING BUDGET: Restricted access to Leeward Marina reduces fuel sales and will impact future slip rentals at the facility. Boaters who pay City taxes for their watercraft expect to have appropriate access to nearby waterways.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will improve citizen satisfaction and will ensure a safe and unimpeded access to adjacent waterways.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Deer Park Ranger Station/Restroom Replacement
DEPARTMENT:	Parks, Recreation & Tourism
CONTACT PERSON:	Michael Nealer
PHONE:	926-1400
PROJECT LOCATION:	Deer Park

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

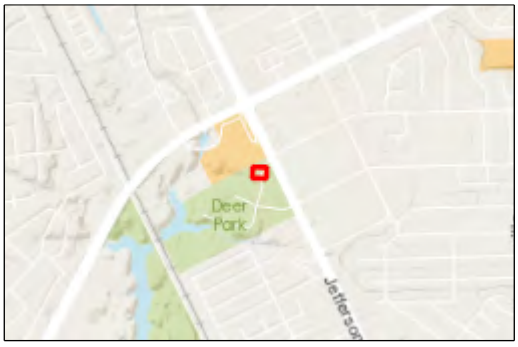
PROJECT CATEGORY:	Parks and Recreation
TOTAL ESTIMATED COST:	$990,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace a nearly 50 year-old office building (built in 1967) and adjacent restroom facility at Deer Park. The existing facilities have deteriorated significantly and are no longer adequate to serve the demands for restrooms and support services for the more than 500,000 annual park users.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$990,000	**$990,000**
Funding Source Total:	-	-	-	-	**$990,000**	**$990,000**
PROJECT COST:						
Construction					$900,000	**$900,000**
Planning/Design					$90,000	**$90,000**
Project Total:	-	-	-	-	**$990,000**	**$990,000**

IMPACT ON OPERATING BUDGET: This project will improve design with adequate insulation and a more effective and efficient HVAC system, both of which will reduce utility costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Improved citizen satisfaction.



PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Golf Course Renovation
DEPARTMENT:	Parks, Recreation & Tourism
CONTACT PERSON:	Michael Nealer
PHONE:	926-1400
PROJECT LOCATION:	Newport News Park

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Parks and Recreation
TOTAL ESTIMATED COST:	$4,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The City's two golf courses were constructed in the mid 1960's. As would be expected with a 45+ year-old golfing complex, the fairways and greens are no longer top quality and the mismatched grasses are more susceptible to disease and weed growth. In addition, the associated infrastructure (drainage, irrigation, bunkers, etc.) needs to be reconfigured and updated to properly support the newer, "faster" (playability), more durable and more disease-resistant grasses now being used on golf courses. Based on current conditions, verified by independent United States Golf Association (USGA) assessments, the two courses are well beyond their useful life and long overdue for renovation and upgrading.

As would be expected with an aging and deteriorating golfing facility, rounds are continuing to decline, maintenance costs are continuing to increase and it is becoming increasingly difficult to attract enough rounds to cover annual operating costs. Funds shown in FY 2019 and FY 2020 are for the renovation of the 18-hole Cardinal Course and practice facility. Design and construction of the 18-hole Championship Course renovation is anticipated to begin in FY 2022.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$2,000,000	$2,000,000		**$4,000,000**
Funding Source Total:	**-**	**-**	**$2,000,000**	**$2,000,000**	**-**	**$4,000,000**
PROJECT COST:						
Construction			$2,000,000	$2,000,000		**$4,000,000**
Planning/Design						**-**
Project Total:	**-**	**-**	**$2,000,000**	**$2,000,000**	**-**	**$4,000,000**

IMPACT ON OPERATING BUDGET: Due to current conditions, play on the Cardinal Course is severely impacted during wet weather, often resulting in the course being closed or with limited capacity 1-2 days after a weather event. This results in a loss of revenue. Continued wear and tear of the Championship Course will require similar renovation beginning in FY 2022.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Due to the deteriorating and outdated agronomy at the Newport News Golf Club and the golfing public's desire to play state-of-the-art facilities, the volume of play has steadily declined over the past decade. Renovation of the courses is expected to increase play and associated revenues, as well as reduce the high maintenance costs associated with the less drought tolerant and less disease resistant grasses now on the course.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Historic Preservation		
DEPARTMENT:	Parks, Recreation & Tourism		
CONTACT PERSON:	Michael Poplawski	**PHONE:**	9261400
PROJECT LOCATION:	Citywide		

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Parks and Recreation		
TOTAL ESTIMATED COST:	$1,515,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The Department of Parks, Recreation and Tourism's Historic Services Division works diligently throughout the year to secure donations, endowments, grants and related funding to undertake improvements to the City's historic sites and facilities. Requested funds will serve to match anticipated grants/donations/endowments for Lee Hall Depot, Thomas J. Newsome House, Lee Hall Mansion, Endview Plantation, Warwick Courthouse, and Virginia War Museum.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$120,000	$120,000	$125,000	$150,000	$150,000	**$665,000**
Grant Funding	$150,000	$150,000	$150,000	$200,000	$200,000	**$850,000**
Funding Source Total:	**$270,000**	**$270,000**	**$275,000**	**$350,000**	**$350,000**	**$1,515,000**
PROJECT COST:						
Other	$270,000	$270,000	$275,000	$350,000	$350,000	**$1,515,000**
Project Total:	**$270,000**	**$270,000**	**$275,000**	**$350,000**	**$350,000**	**$1,515,000**

IMPACT ON OPERATING BUDGET: Rehabilitation and expansion of existing sites/facilities may require adjustment to budgeted operating costs for utilities, contractual services and related. This impact is not specifically quantified at this time since projects have not been finalized.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will continue identification, understanding and preservation of the City's unique historical and archaeological assets, as well as community engagement and cultural awareness.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Huntington Park Tennis Center Stadium Court
DEPARTMENT:	Parks, Recreation & Tourism
CONTACT PERSON:	Tammy Jordan
PHONE:	9261400
PROJECT LOCATION:	Huntington Park

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Parks and Recreation
TOTAL ESTIMATED COST:	$195,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project involves constructing a stadium court at the Huntington Park Tennis Center. A stadium court will allow the facility to draw more tournaments and bigger competitions for spectators to watch players compete.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget			$195,000			**$195,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**-**	**-**	**$195,000**	**-**	**-**	**$195,000**
PROJECT COST:						
Construction			$170,000			**$170,000**
Planning/Design			$25,000			**$25,000**
Project Total:	**-**	**-**	**$195,000**	**-**	**-**	**$195,000**

IMPACT ON OPERATING BUDGET: With the completion of the project, additional revenues from tournaments are anticipated.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The public's request for additional tennis opportunities will be met.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Lee Hall Depot - Interior Restoration		
DEPARTMENT:	Parks, Recreation & Tourism		
CONTACT PERSON:	Michael Nealer	**PHONE:**	926-1400
PROJECT LOCATION:	Lee Hall Depot		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH	X		Community Renewal & Maint	X
	CITYWIDE			Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	
PROJECT CATEGORY:	Parks and Recreation			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$150,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The restoration of historic Lee Hall Depot has been an ongoing project. The structure has been moved across the tracks (in order to save it from demolition) and the exterior has now been refurbished. Completing the interior will create a facility that is both revenue producing, as well as an educational asset to the City's Lee Hall Village area is the next phase in bringing this project to completion.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$75,000	$75,000				**$150,000**
Grant Funding						**-**
Funding Source Total:	**$75,000**	**$75,000**	**-**	**-**	**-**	**$150,000**
PROJECT COST:						
Construction	$75,000	$75,000				**$150,000**
Project Total:	**$75,000**	**$75,000**	**-**	**-**	**-**	**$150,000**

IMPACT ON OPERATING BUDGET: Revenue is anticipated from scheduled meetings and events in designated rooms, as well as from educational classes related to the interpretation of railroad themes, transportation history and the transformation of the local area from an agrarian to urban community. Possible additional revenues are expected from the increased ability to also attract major train enthusiasts (model railroaders, collectors, etc.).

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The revitalization of the Lee Hall Village area of the City has been the goal of many citizens. By restoring this iconic historic building, the City has taken the lead in beautifying and restoring the prominence of the area. No longer a disused and deteriorating structure, the completed train station will bring vibrancy and increased visitation to the community with corollary business transactions through special events, education and rental activities.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Park Facilities		
DEPARTMENT:	Parks, Recreation & Tourism		
CONTACT PERSON:	Michael Nealer	**PHONE:**	9261400
PROJECT LOCATION:	Citywide		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	X
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Parks and Recreation			Mandated/Legal Requirement	X

TOTAL ESTIMATED COST:	$2,220,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The selected refurbishment/repair/replacement of park facilities and structures including playgrounds, buildings, trails, overlooks, picnic shelters, exhibits, fencing, piers, docks, stages, lighting, waterlines, signage, monuments and other park structures/amenities.

Anticipated projects include:
FY2017 - Replace park maintenance facilities and citywide playground replacement
FY2018 - Refurbish public restroom facilities and picnic shelters at Huntington Park and Anderson Park, and citywide playground replacement
FY2019 - Citywide playground replacement and citywide picnic shelter replacement, and lighting
FY2020 - Trail improvements, citywide picnic shelter replacement and lighting
FY2021 - Citywide picnic shelter replacement, replacement/refurbishment of picnic shelters at Newport News Park/Deer Park

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$400,000	$400,000	$400,000	$420,000	$600,000	**$2,220,000**
Funding Source Total:	**$400,000**	**$400,000**	**$400,000**	**$420,000**	**$600,000**	**$2,220,000**
PROJECT COST:						
Construction	$400,000	$400,000	$400,000	$420,000	$600,000	**$2,220,000**
Planning/Design						**-**
Project Total:	**$400,000**	**$400,000**	**$400,000**	**$420,000**	**$600,000**	**$2,220,000**

IMPACT ON OPERATING BUDGET: The project will have minimal impact on the operating budget foreseen. Additional utility costs would be offset by energy-saving technologies incorporated in replacement projects. Additional savings may result from reduced maintenance costs, more efficient facilities, etc.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Customer satisfaction of the City's parks is closely tied to the condition of the facilities/amenities at each location. Replacing outdated restrooms, playgrounds, picnic shelters, etc. will increase overall citizen satisfaction with their tax-supported services. Projects will also address public safety, facility usability, park attractiveness and accessibility issues.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Park Roadway Paving & Improvements
DEPARTMENT:	Parks, Recreation & Tourism
CONTACT PERSON:	Michael Nealer
PHONE:	926-1400
PROJECT LOCATION:	Parks - Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Parks and Recreation
TOTAL ESTIMATED COST:	$636,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: Numerous roadways and parking lots in various City parks have deteriorated to the point where they are in critical need of extensive repair and resurfacing. The recent harsh winters have accelerated the decline of these access points and parking surfaces. It has resulted in ongoing maintenance, safety, access and aesthetic concerns. Major areas in need of renovation include the roadways and parking lots at Huntington Park, Deer Park and Newport News Park.

FY17: Huntington Park Boat Ramp
FY18: Deer Park roadways and parking lots
FY19: Newport News Park roadways and parking areas
FY20: Newport News Park roadways and parking areas
FY21: Selected parking lots - Beechlake, Park, Potter's Field, and others

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$142,000	$294,000	$100,000	$100,000	**$636,000**
Funding Source Total:	**-**	**$142,000**	**$294,000**	**$100,000**	**$100,000**	**$636,000**
PROJECT COST:						
Construction		$142,000	$294,000	$100,000	$100,000	**$636,000**
Project Total:	**-**	**$142,000**	**$294,000**	**$100,000**	**$100,000**	**$636,000**

IMPACT ON OPERATING BUDGET: This project will reduce repair costs for maintenance of substandard roadways, improve user safety, and reduce associated liability issues.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: This project provides for safe and easy access to parks and park facilities. Citizen complaints will be reduced and overall park aesthetics will be improved.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Public Landscaping		
DEPARTMENT:	Parks, Recreation & Tourism		
CONTACT PERSON:	Michael Poplawski	**PHONE:**	9261400
PROJECT LOCATION:	Citywide		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	X
	CENTRAL			Environmental Sustainability	X
	NORTH			Community Renewal & Maint	X
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	
				Max Emphasis Public Safety	
PROJECT CATEGORY:	Parks and Recreation			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$700,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project involves the replacement of deteriorated landscapes and streetscapes lost or severely damaged by weather, construction, or other human or natural influences. Efforts will include the replacement of trees on public properties around buildings and along streets, avenues and boulevards. Also, new landscaping and irrigation associated with upgrades to City streets, buildings, boulevards, parks, etc. will be installed.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$125,000	$125,000	$150,000	$150,000	$150,000	**$700,000**
Funding Source Total:	**$125,000**	**$125,000**	**$150,000**	**$150,000**	**$150,000**	**$700,000**
PROJECT COST:						
Construction	$125,000	$125,000	$150,000	$150,000	$150,000	**$700,000**
Project Total:	**$125,000**	**$125,000**	**$150,000**	**$150,000**	**$150,000**	**$700,000**

IMPACT ON OPERATING BUDGET: Negligible in most cases where replacement of deceased plant material is involved. Some increase in annual maintenance cost will be associated with upkeep of any new landscaping.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: As a result of the project, there will be an increased attractiveness of the City to citizens, prospective residents, businesses and visitors.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Recreation Facilities		
DEPARTMENT:	Parks, Recreation & Tourism		
CONTACT PERSON:	Tammy Jordan	**PHONE:**	9261400
PROJECT LOCATION:	Citywide		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	X
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Parks and Recreation			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$1,820,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project will provide for upgrading/refurbishing/replacing/repairing community centers, athletic fields, pools and sports courts throughout the City. Funding will include building renovations, field/court surfaces, lighting, scoreboards, bleachers, irrigation, fencing and related amenities.

Specific projects include:
2017 - Irrigation, turf and lighting refurbishment on selected multipurpose fields; shading for Midtown playground; bigger bleachers at Stoney Run Complex; replace existing windows and install a restroom upstairs in the Doris Miller Community Center; design and construct a Pickleball Court at Huntington Park

2018 - Building renovations at Senior Centers and Warwick Recreation Center; athletic field lighting upgrades; resurface six tennis courts and replace other half of existing fencing around courts at Huntington Park Tennis Center; replace existing Colorado Timing System at BMCC Aquatic Center

2019 - Renovations at Doris Miller Community Center; turf and lighting renovation at selected athletic fields

2020 - Renovations at Riverview Gymnastics Center; new athletic lighting at one multipurpose field; tennis court resurfacing at various high schools

2021 - Renovation and expansion of soccer fields at Riverview Farm Park; tennis court resurfacing at various high schools; building renovations at aging facilities; athletic field lighting upgrades and expansion of recreation fields at Dozier and Boulevard Park; resurface tennis courts throughout the city; repair decking and interior of pool at BMCC Aquatic Center and Doris Miller.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$350,000	$350,000	$350,000	$385,000	$385,000	**$1,820,000**
Funding Source Total:	**$350,000**	**$350,000**	**$350,000**	**$385,000**	**$385,000**	**$1,820,000**
PROJECT COST:						
Construction	$350,000	$350,000	$350,000	$385,000	$385,000	**$1,820,000**
Project Total:	**$350,000**	**$350,000**	**$350,000**	**$385,000**	**$385,000**	**$1,820,000**

IMPACT ON OPERATING BUDGET: Minimal impact. There will be routine maintenance and repair, marginal increase in utilities and agricultural supplies, decrease in annual maintenance, and repair expenditures are expected to offset most increases.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Customer satisfaction of the City's community centers and ball fields are closely tied to the condition of the facilities/amenities at each location. Replacing outdated lighting, court surfaces, and facility upgrades will increase overall citizen satisfaction. Projects will also address public safety, facility usability and accessibility issues.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Stoney Run Greenway
DEPARTMENT:	Engineering / Parks, Recreation & Tourism
CONTACT PERSON:	David T. Wilkinson
PHONE:	(757) 926-8690
PROJECT LOCATION:	

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Parks and Recreation
TOTAL ESTIMATED COST:	$200,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: During the comprehensive planning process that took place during the early 1990's, citizen task forces recommended the creation of a citywide greenway system. This recommendation resulted in the creation of specific policies and strategies, as well as the identification of greenways on the land use map in the adopted 1993 Framework for the Future. This effort was strengthened with the 2001 version of the Framework for the Future by relating water quality improvement strategies to the existing greenway recommendations to be consistent with the State's Chesapeake Bay Preservation Act. This project remains a part of the current Framework for the Future 2030.

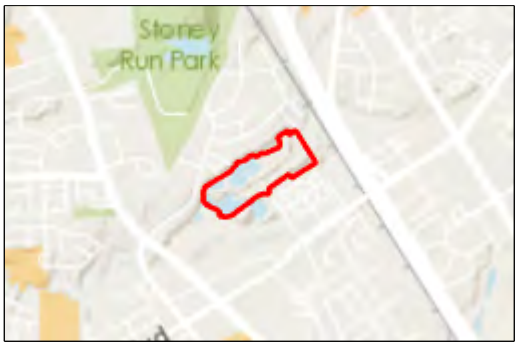
Greenways are corridors of protected open space established for the conservation and enhancement of natural resources and for recreation purposes. Greenways often follow natural land or water features and connect nature preserves, parks, cultural features and historic sites with each other and with populated areas. As part of this effort, City Council adopted the Stoney Run Greenway Corridor Plan on July 8, 2003. The first phase of this project will construct the initial public access/parking off Old Court House Way and first section of trails on the City-owned property along the Stoney Run watershed between Old Courthouse Way and Denbigh Boulevard.

This project will be split in three phases with the first phase being land acquisition, followed by two phases of construction. It is anticipated that this project will qualify for Transportation Alternatives Program Grant funding through VDOT.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$40,000	**$40,000**
Grant Funding					$160,000	**$160,000**
Funding Source Total:	-	-	-	-	**$200,000**	**$200,000**
PROJECT COST:						
Construction						-
Contingency					$5,460	**$5,460**
Internal Staff Cost					$12,730	**$12,730**
Other						-
Planning/Design						-
Site Acquisition					$181,810	**$181,810**
Project Total:	-	-	-	-	**$200,000**	**$200,000**

IMPACT ON OPERATING BUDGET: Additional funding will be required for ongoing maintenance and security.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: As a result of the project, there will be improved water quality, a reduction in erosion, enhanced wildlife areas, passive park areas with recreational trails and educational opportunities on publicly owned land.



PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Stoney Run Park
DEPARTMENT:	Parks, Recreation & Tourism
CONTACT PERSON:	Tammy Jordan/Michael Nealer
PHONE:	926-1400
PROJECT LOCATION:	Stoney Run Park

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Parks and Recreation
TOTAL ESTIMATED COST:	$2,919,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project includes the design and construction of a City park located on the old landfill. This project is a joint effort of Public Works and Parks, Recreation & Tourism. The project includes the construction of picnic areas, public restrooms, walking and bike trails, multipurpose fields, lighting, a destination playground, parking facilities, and basketball and tennis courts.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$153,000	$906,000	$425,000	$1,435,000	**$2,919,000**
Funding Source Total:	**-**	**$153,000**	**$906,000**	**$425,000**	**$1,435,000**	**$2,919,000**
PROJECT COST:						
Construction		$103,000	$856,000	$375,000	$1,385,000	**$2,719,000**
Planning/Design		$50,000	$50,000	$50,000	$50,000	**$200,000**
Project Total:	**-**	**$153,000**	**$906,000**	**$425,000**	**$1,435,000**	**$2,919,000**

IMPACT ON OPERATING BUDGET: Anticipated increase in utility costs, staffing and field maintenance upon completion of proposed projects.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The provision of additional recreational opportunities to meet citizen demands for service.

PARKS AND RECREATION CAPITAL PROJECT

PROJECT NAME:	Warwicktowne Archaeological Study
DEPARTMENT:	Parks, Recreation & Tourism
CONTACT PERSON:	Michael Poplawski
PHONE:	926-1400
PROJECT LOCATION:	City Farm site / Warwicktowne

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Parks and Recreation
TOTAL ESTIMATED COST:	$300,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: This project will fund the Phase II/III Cultural Research Survey of Warwicktowne at Riverview Farm Park/City Farm.

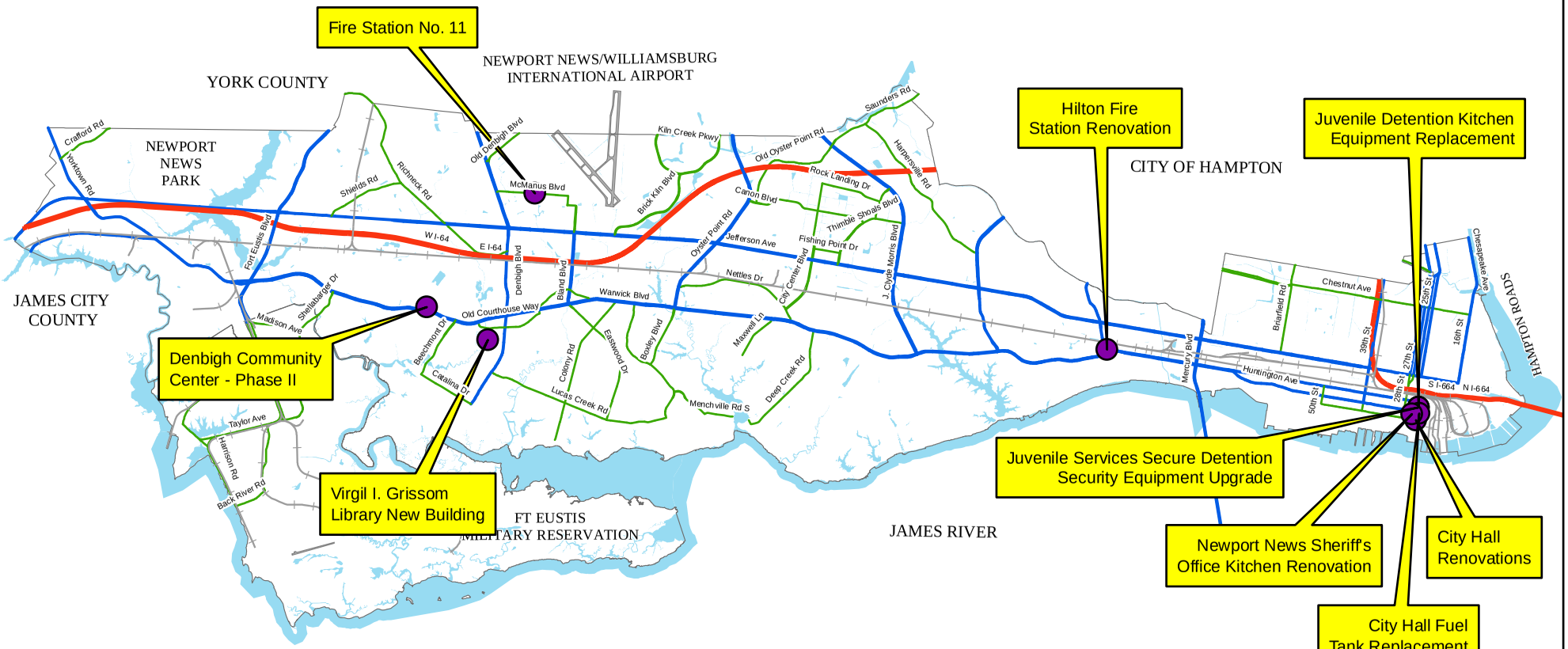
FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$100,000	$100,000	$100,000			**$300,000**
Funding Source Total:	**$100,000**	**$100,000**	**$100,000**	**-**	**-**	**$300,000**
PROJECT COST:						
Other	$100,000	$100,000	$100,000			**$300,000**
Project Total:	**$100,000**	**$100,000**	**$100,000**	**-**	**-**	**$300,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Identification, understanding and preservation of a potentially unique historical and archaeological assets.

PUBLIC BUILDINGS

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Public Buildings



Citywide

Arc Flash Hazard Analysis, Identification and Mitigation
Emergency Generators
Library System Renovation, Remodeling, Upgrading
Major Renovations and Repairs
Parking Lot and Facility Paving
Security Video System Upgrade and Maintenance

Legend

- Public Buildings

PUBLIC BUILDINGS

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
City Hall Renovations	$0	$0	$350,000	$0	$350,000	**$700,000**
Hilton Fire Station Renovation	$0	$0	$125,000	$125,000	$0	**$250,000**
Library System Renovation, Remodeling, Upgrading	$200,000	$200,000	$400,000	$300,000	$300,000	**$1,400,000**
Parking Lot and Facility Paving	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
*Arc Flash Hazard Analysis, Identification and Mitigation	$500,000	$250,000	$0	$0	$0	**$750,000**
*Juvenile Services Secure Detention Security Equipment Upgrade	$0	$448,702	$0	$0	$0	**$448,702**
*Newport News Sheriff's Office Cameras	$296,531	$0	$0	$0	$0	**$296,531**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$1,096,531**	**$998,702**	**$975,000**	**$525,000**	**$750,000**	**$4,345,233**
GEN OBLIGATION BOND (GOB)						
Denbigh Community Center - Phase II	$0	$0	$0	$800,000	$7,500,000	**$8,300,000**
Emergency Generators	$0	$0	$75,000	$300,000	$75,000	**$450,000**
Fire Station No. 11	$0	$0	$0	$0	$300,000	**$300,000**
Major Renovations and Repairs	$1,100,000	$1,100,000	$1,600,000	$900,000	$1,400,000	**$6,100,000**
Virgil I. Grissom Library New Building	$0	$0	$0	$800,000	$6,000,000	**$6,800,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$1,100,000**	**$1,100,000**	**$1,675,000**	**$2,800,000**	**$15,275,000**	**$21,950,000**
GRANT FUNDING						
*Juvenile Services Secure Detention Security Equipment Upgrade	$0	$149,568	$0	$0	$0	**$149,568**
*Newport News Sheriff's Office Cameras	$98,844	$0	$0	$0	$0	**$98,844**
TOTAL GRANT FUNDING:	**$98,844**	**$149,568**	**$0**	**$0**	**$0**	**$248,412**
PUBLIC BUILDINGS TOTAL:	***$2,295,375***	***$2,248,270***	***$2,650,000***	***$3,325,000***	***$16,025,000***	***$26,543,645***

PUBLIC BUILDINGS

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Arc Flash Hazard Analysis, Identification and Mitigation	$250,000	$0	$0	$0	$0	**$250,000**
City Hall Renovations	$0	$500,000	$0	$500,000	$0	**$1,000,000**
Hilton Fire Station Renovation	$0	$125,000	$125,000	$0	$0	**$250,000**
Juvenile Services Secure Detention Security Equipment Upgrade	$448,702	$0	$0	$0	$0	**$448,702**
Library System Renovation, Remodeling, Upgrading	$200,000	$400,000	$300,000	$300,000	$300,000	**$1,500,000**
Parking Lot and Facility Paving	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
*City Hall Fuel Tank Replacement	$0	$0	$0	$400,000	$0	**$400,000**
*Juvenile Detention Kitchen Equipment Replacement	$151,624	$0	$0	$0	$0	**$151,624**
*Newport News Sheriff's Office Kitchen Renovation	$0	$0	$0	$896,000	$0	**$896,000**
*Security Video System Upgrade and Maintenance	$0	$100,000	$100,000	$100,000	$100,000	**$400,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$1,150,326**	**$1,225,000**	**$625,000**	**$2,296,000**	**$500,000**	**$5,796,326**
GEN OBLIGATION BOND (GOB)						
Denbigh Community Center - Phase II	$0	$0	$800,000	$7,500,000	$0	**$8,300,000**
Emergency Generators	$0	$75,000	$300,000	$75,000	$300,000	**$750,000**
Fire Station No. 11	$0	$0	$0	$300,000	$3,500,000	**$3,800,000**
Major Renovations and Repairs	$1,100,000	$1,600,000	$900,000	$1,400,000	$2,000,000	**$7,000,000**
Virgil I. Grissom Library New Building	$0	$0	$800,000	$6,000,000	$5,200,000	**$12,000,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$1,100,000**	**$1,675,000**	**$2,800,000**	**$15,275,000**	**$11,000,000**	**$31,850,000**
GRANT FUNDING						
Juvenile Services Secure Detention Security Equipment Upgrade	$149,568	$0	$0	$0	$0	**$149,568**
TOTAL GRANT FUNDING:	**$149,568**	**$0**	**$0**	**$0**	**$0**	**$149,568**
PUBLIC BUILDINGS TOTAL:	***$2,399,894***	***$2,900,000***	***$3,425,000***	***$17,571,000***	***$11,500,000***	***$37,795,894***

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Arc Flash Hazard Analysis, Identification and Mitigation
DEPARTMENT:	Engineering
CONTACT PERSON:	Stephen Williams
PHONE:	757-926-8113
PROJECT LOCATION:	City Wide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The scope for this project consists of professional services required to identify arc flash hazards within electric equipment located within City buildings or facilities and propose means to protect City staff from identified hazards. Recommendations will be provided to reduce identified hazards and establish safe work spaces through the identification of required personal protective equipment and appropriate labeling of electrical equipment. Funding for Arc Flash Hazard Analysis, Identification and Mitigation related to the City's Sewer Pump Stations is included in the Sanitary Sewer Rehabilitation Category in the Sanitary Sewer Rehabilitation Project.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$250,000					**$250,000**
Funding Source Total:	**$250,000**	**-**	**-**	**-**	**-**	**$250,000**
PROJECT COST:						
Planning/Design	$250,000					**$250,000**
Project Total:	**$250,000**	**-**	**-**	**-**	**-**	**$250,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The National Electric Code, OSHA and National Fire Protection Association regulations require the City to identify and protect employees from arc flash hazards and to label electrical equipment with appropriate hazard data and required personal protective equipment necessary for a safe working space. Once completed, the City will be in compliance with the Arc Flash requirements.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	City Hall Fuel Tank Replacement
DEPARTMENT:	Engineering
CONTACT PERSON:	Bruce Wobser
PHONE:	926-3668
PROJECT LOCATION:	2307 Huntington Ave

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

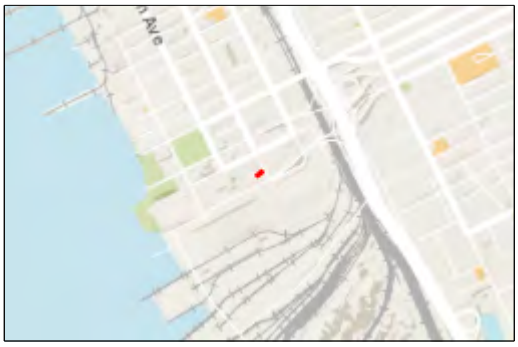
PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$400,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: This project will replace the underground fuel storage tanks, pumps, and canopy at the fueling station located at City Hall. The existing fuel tanks are reaching their life expectancy and are at risk for leakage. This facility is essential for the fueling of City vehicles located at the southern region of the city.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget				$400,000		**$400,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**-**	**-**	**-**	**$400,000**	**-**	**$400,000**
PROJECT COST:						
Construction				$350,000		**$350,000**
Internal Staff Cost				$50,000		**$50,000**
Project Total:	**-**	**-**	**-**	**$400,000**	**-**	**$400,000**

IMPACT ON OPERATING BUDGET: The project will have minimal effect on the operating budget.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The facility will maintain current employee efficiency as this is the only fueling facility in the southern portion of the city.



PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	City Hall Renovations
DEPARTMENT:	Engineering
CONTACT PERSON:	Bruce Wobser
PHONE:	9263668
PROJECT LOCATION:	2400 Washington Ave

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

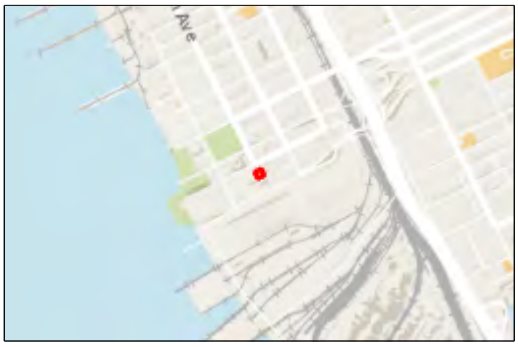
PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$1,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Renovations to the City Hall building:
FY 2018 - Fire Department Administration, 6th Floor
FY 2020 - City Manager's Office, 10th Floor

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$500,000		$500,000		**$1,000,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**-**	**$500,000**	**-**	**$500,000**	**-**	**$1,000,000**
PROJECT COST:						
Construction		$465,000		$465,000		**$930,000**
Planning/Design		$35,000		$35,000		**$70,000**
Project Total:	**-**	**$500,000**	**-**	**$500,000**	**-**	**$1,000,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Office renovations and modifications will support employee efficiency objectives.



PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Denbigh Community Center - Phase II
DEPARTMENT:	Parks, Recreation & Tourism / Engineering
CONTACT PERSON:	Tammy Jordan
PHONE:	9261400
PROJECT LOCATION:	Adjacent to existing Denbigh Community Center

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$8,300,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Phase II of Denbigh Community Center will include a pool, water playground, locker rooms and additional multi-purpose rooms. Funding is for design identified in FY 2019 with construction in FY 2020.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$800,000	$7,500,000		**$8,300,000**
Funding Source Total:	**-**	**-**	**$800,000**	**$7,500,000**	**-**	**$8,300,000**
PROJECT COST:						
Construction				$7,500,000		**$7,500,000**
Internal Staff Cost			$56,000			**$56,000**
Planning/Design			$744,000			**$744,000**
Project Total:	**-**	**-**	**$800,000**	**$7,500,000**	**-**	**$8,300,000**

IMPACT ON OPERATING BUDGET: There is an estimation of $500,000 in additional operating costs for utilities, chemicals and staffing once open for operation. It is anticipated that additional revenue will be generated from pool and room rentals and instructional classes.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project would expand recreational opportunities for the residents of Newport News.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Emergency Generators		
DEPARTMENT:	Public Works		
CONTACT PERSON:	Eddie Crockett	**PHONE:**	757-269-2751
PROJECT LOCATION:	Citywide		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Public Buildings			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$750,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will install full power generators and other ancillary equipment as necessary to provide backup electrical power for replacement of aged generators at: (1) Electronic Maintenance building at the Public Works Center, (2) GATT Site Radio Tower, (3) Fire Station #8 to include 800 Mhz Radio Tower power, (4) Emergency Operations Center (EOC), (5) 911 Operations Center, (6) Adult Detention Facility, (7) Signalized Intersection upgrades with UPS systems to ensure key traffic intersections are operational after a storm system impact or equivalent power outage.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$75,000	$300,000	$75,000	$300,000	**$750,000**
Funding Source Total:	**-**	**$75,000**	**$300,000**	**$75,000**	**$300,000**	**$750,000**
PROJECT COST:						
Construction			$300,000		$300,000	**$600,000**
Planning/Design		$75,000		$75,000		**$150,000**
Project Total:	**-**	**$75,000**	**$300,000**	**$75,000**	**$300,000**	**$750,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The result of these investments provide a stable power support for key public buildings to include First Responder facilities, uninterrupted radio communications systems, and citywide recovery efforts to provide emergency services to the residents of Newport News resulting from severe storm system impacts and or widespread power outages.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Fire Station No. 11		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Bruce Wobser	**PHONE:**	9263668
PROJECT LOCATION:	Turnberry Blvd/McManus Blvd area		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH	X		Community Renewal & Maint	
	CITYWIDE			Fiscal Mgt & Efficient Ops	
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Public Buildings			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$3,800,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Funding will provide for the design and construction of a permanent fire station located on Turnberry Boulevard. This structure will replace the temporary Fire Station 11 located on leased property at Newport News Williamsburg International Airport. The current Fire Station 11 was established to serve an underserved area of the city along the Richneck / Colony Pines corridor. These neighborhoods experienced extraordinarily high response times due to the lack of resources in close proximity.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)				$300,000	$3,500,000	**$3,800,000**
Funding Source Total:	**-**	**-**	**-**	**$300,000**	**$3,500,000**	**$3,800,000**
PROJECT COST:						
Construction					$3,500,000	**$3,500,000**
Planning/Design				$300,000		**$300,000**
Site Acquisition						**-**
Project Total:	**-**	**-**	**-**	**$300,000**	**$3,500,000**	**$3,800,000**

IMPACT ON OPERATING BUDGET: Extended response times to the Richneck / Colony Pines corridor present a potential safety concern for residents and a potential adverse impact on accreditation and ISO ratings. The current Fire Station 11 location was acquired through a Memorandum of Understanding and Lease Agreement with Newport News – Williamsburg International Airport in 2008. The current structure was designed to be a temporary housing location and is no longer structurally suitable to serve our needs. The lease will expire in 2018 and in the absence of a suitable and permanent replacement, the lease will have to be renegotiated and building upgrades will be required.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The current Fire Station 11 location has improved response times to the underserved areas of the Richneck / Colony Pines corridor. However, the times continue to exceed the bench mark of ISO and accreditation due to the winding route to thoroughfares. Additionally, the need to begin this project has been understated in previous CIP requests. The lease for the current fire station location will expire in 2018 and will have to be renegotiated without other arrangements.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Hilton Fire Station Renovation
DEPARTMENT:	Planning / Engineering
CONTACT PERSON:	Saul Gleiser / Bruce Wobser
PHONE:	9268076/9263668
PROJECT LOCATION:	Main St - Hilton

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

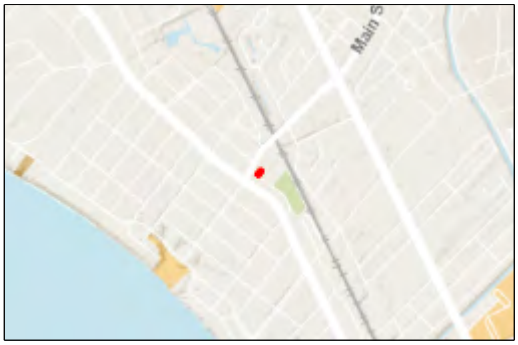
PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The committee formed to evaluate the future use of the Hilton Fire Station has prepared a recommendation that includes renovation of both floors. The fire department would use the first floor space to accommodate a fire department museum and a large community room. The scope would include ADA compliant restroom facilities. The second floor would be upgraded for library storage.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$125,000	$125,000			**$250,000**
Funding Source Total:	**-**	**$125,000**	**$125,000**	**-**	**-**	**$250,000**
PROJECT COST:						
Construction		$125,000	$125,000			**$250,000**
Project Total:	**-**	**$125,000**	**$125,000**	**-**	**-**	**$250,000**

IMPACT ON OPERATING BUDGET: There will be minimum impact.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The creation of a fire museum and community room would promote an interaction between first responders and the citizens of Newport News.



PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Juvenile Detention Kitchen Equipment Replacement
DEPARTMENT:	Juvenile Services
CONTACT PERSON:	Dawn Barber
PHONE:	5705177
PROJECT LOCATION:	350 25th Street

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$151,624
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The Department of Juvenile Services has been operational since 2005 and is currently utilizing a contracted food service vendor to provide three meals per day, seven days per week, 365 days per year, for on average 66 residents. The heavy duty, industrial-type kitchen equipment has reached or exceeded its life span and the cost of frequent repairs is no longer fiscally responsible.

The list of equipment that is in need of replacement includes: dishwasher, gas fryer, griddle range, gas range, freezer, refrigerator, convection oven, convection steamer, tilting kettle, 20-quart mixer, 40-quart mixer, drop-in hot well, meat slicer, ice maker, proofer heating cabinet, microwave, milk cooler, conveyor toaster, condenser, and walk-in combination cooler/freezer. The cost estimate does not include sales tax or installation/removal of walk-in freezer.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$151,624					**$151,624**
Funding Source Total:	**$151,624**	**-**	**-**	**-**	**-**	**$151,624**
PROJECT COST:						
Other	$151,624					**$151,624**
Project Total:	**$151,624**	**-**	**-**	**-**	**-**	**$151,624**

IMPACT ON OPERATING BUDGET: In FY 2015 and FY 2016, the Department spent approximately $14,725 for repair and maintenance of kitchen equipment.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Fiscally responsible operations.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Juvenile Services Secure Detention Security Equipment Upgrade
DEPARTMENT:	Juvenile Services
CONTACT PERSON:	Dawn D. Barber
PHONE:	757.570.5177
PROJECT LOCATION:	350-25th Street, Newport News, Virginia 23607

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$598,270
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: A complete refurnish and installation of the Detention Center's security control system is needed due to the current system becoming antiquated. The general description of the work will include the removal and replacement of the Center's: (1) Locking system to include touchscreen control stations and computer stations in the Master and Auxiliary Control rooms and in all 11 Pod Chartrooms. This system also entails controls for the annunciation systems for the locking system, intercommunications systems and other security systems, servers and control panels. (2) Intercom and paging system removal and replacement that includes intercom stations, ceiling mounted speakers, exterior paging horns and intercom master stations. (3) Digital Color Closed Circuit Television System that includes the removal and furnish of video servers capable of converting analog video to digital video for existing cameras, network video recorders and video review workstation for archiving of videos.

The current technology is ending its service life. The cost of repair is now more expensive than replacement and is no longer cost effective. Should this total system be replaced within the proposed timeframe, the City will be able to leverage the Sheriff Department's current contract with Blackcreek, the firm designing the new security system for the jail.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$448,702					**$448,702**
Grant Funding	$149,568					**$149,568**
Funding Source Total:	**$598,270**	**-**	**-**	**-**	**-**	**$598,270**
PROJECT COST:						
Planning/Design	$598,270					**$598,270**
Project Total:	**$598,270**	**-**	**-**	**-**	**-**	**$598,270**

IMPACT ON OPERATING BUDGET: The Juvenile Services operating budget is not sufficient to fund the replacement of the security system.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The installation of a state of the art security system in the Secure Detention facility is a key component and is essential in maintaining operational efficiency, safety of the juvenile residents and staff, security of the overall facility and community, and for the enhancement of staff effectiveness. The protective requirement afforded by a full-coverage security system is mandated by the Federal Government as a requirement of the Prison Rape Elimination Act (PREA) and the Department of Juvenile Justice.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Library System Renovation, Remodeling, Upgrading
DEPARTMENT:	Libraries and Information Services
CONTACT PERSON:	Izabela M. Cieszynski
PHONE:	9261350
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$1,500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Funding will provide for the highest priority library renovation and upgrade projects. Planned projects include interior library improvements including regularly scheduled painting of buildings, carpet replacement, furniture replacement and upgrades to meet library patron requirements for electrical, data, and lighting. These investments will also improve utility efficiency. Heavy use by the public requires furniture/workstation replacement on a regular basis and general building upgrades that directly impact the public's ability to use the libraries effectively and in a welcoming environment.

FY 2017 - 2021 projects include establishment of early learning centers at Grissom, Main Street and Bailey Libraries, furniture replacement for Main Street Library and Bailey Library, establishment of a regular painting and carpet replacement schedule for each library location and an upgrade to category 6 network cabling for the Main Street Library.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$200,000	$400,000	$300,000	$300,000	$300,000	**$1,500,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**$200,000**	**$400,000**	**$300,000**	**$300,000**	**$300,000**	**$1,500,000**
PROJECT COST:						
Construction	$150,000	$300,000	$200,000	$200,000	$200,000	**$1,050,000**
Other	$50,000	$100,000	$100,000	$100,000	$100,000	**$450,000**
Project Total:	**$200,000**	**$400,000**	**$300,000**	**$300,000**	**$300,000**	**$1,500,000**

IMPACT ON OPERATING BUDGET: Internal operational efficiency and effectiveness will be improved, addition to improved customer experience and service throughout the building environment.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: 1. Library customers will find a sufficient number of electrical outlets available for power their laptops for research and educational purposes.
2. Broken furniture would not be used by the public.
3. Buildings are welcoming and able to accommodate use by the public.
4. Young children will have early learning.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Major Renovations and Repairs
DEPARTMENT:	Public Works
CONTACT PERSON:	Mick Monelly
PHONE:	269-2733
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$7,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Funding will provide for ongoing renovation and repair of City-owned buildings to include replacing major HVAC system components (boilers, cooling towers, air handlers and chillers), roof replacements, carpet replacement, and exterior building repairs. The Building Services Division of the Department of Public Works maintains a prioritized list of projects by fiscal year.

Facility assessments completed on 12 buildings (which represents approximately 20% of the total facility portfolio measured in square feet) indicates the need for substantial increase to the Major Renovation and Repair program. The survey, performed by VFA Inc. (since acquired by Accuent Property Management Systems), assessed facility component conditions and age, calculated remaining life expectancy (using BOMA / industry standards for lifespans) and replacement cost (using R.S. Means pricing).

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget						**-**
Gen Obligation Bond (GOB)	$1,100,000	$1,600,000	$900,000	$1,400,000	$2,000,000	**$7,000,000**
Funding Source Total:	**$1,100,000**	**$1,600,000**	**$900,000**	**$1,400,000**	**$2,000,000**	**$7,000,000**
PROJECT COST:						
Other	$1,100,000	$1,600,000	$900,000	$1,400,000	$2,000,000	**$7,000,000**
Project Total:	**$1,100,000**	**$1,600,000**	**$900,000**	**$1,400,000**	**$2,000,000**	**$7,000,000**

IMPACT ON OPERATING BUDGET: HVAC equipment will be replaced with higher efficiency models resulting in a reduction in energy consumption/costs. Roof replacements will result in new warranties (up to 20 years) which will reduce repair costs during the warranty period. Proactive repairs/replacements of major building components on a planned schedule is significantly less costly than reacting to emergencies as they arise.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Public building occupants and citizens will realize improvements in climate control and roof integrity.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Newport News Sheriff's Office Kitchen Renovation
DEPARTMENT:	Sheriff
CONTACT PERSON:	Valare' Allen
PHONE:	757-926-8190
PROJECT LOCATION:	224-26th Street

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$896,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: Funding will provide for the renovation, modernization and infrastructure improvements of the City Jail Kitchen. The HVAC (air conditioning) system has been previously approved by City Council pursuant to Resolutions 12238-12 and 12438-13 with no funding.

The expansion and renovation project is needed for three primary reasons:
(1) Current space is inadequate to meet the demands of the current food storage, preparation, serving and clean-up.
(2) Infrastructure (electrical, mechanical, plumbing) repair and replacement is required.
(3) Removal of blind spots and improvement of sight lines will improve safety and security for inmates and staff.

Built in the mid-seventies, the current jail kitchen has not undergone a major renovation to the work space, equipment or infrastructure. Today, the jail's kitchen does not meet acceptable jail industry standards. The renovation would consists of:

- Reconfiguration for better flow and line of sight view.
- Restroom for staff to include provisions for Americans with Disabilities Act (ADA).
- Vented hood and fire suppression.
- Larger freezer and cooler space.
- Larger scullery-dishwashing area.
- Flooring and lighting.
- Mixers, ice-machine, steam kettles, etc.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget				$896,000		**$896,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**-**	**-**	**-**	**$896,000**	**-**	**$896,000**
PROJECT COST:						
Construction				$750,000		**$750,000**
Internal Staff Cost				$40,000		**$40,000**
Other				$26,000		**$26,000**
Planning/Design				$80,000		**$80,000**
Project Total:	**-**	**-**	**-**	**$896,000**	**-**	**$896,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The kitchen would be renovated to improve circulation patterns and eliminate blind spots. Inmates assist in the preparation of food items and blind spots create a potential security and safety risk to personnel.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Parking Lot and Facility Paving		
DEPARTMENT:	Public Works		
CONTACT PERSON:	Mick Monelly	**PHONE:**	2692733
PROJECT LOCATION:	Citywide		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Public Buildings			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$500,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Based on current conditions and assessment, parking lots at municipal buildings citywide require (in varying degrees) base stabilization, re-paving, re-striping, and re-signing. Similarly, concrete aprons, curbs, gutters and facility sidewalks require repair, replacement and upgrades. There is currently no comprehensive pavement management program for City-maintained buildings. Prioritized projects include Fire Station #007, the combined Briarfield Police precinct / Fire Warehouse / City Warehouse (old Coats & Clark facility), Police Training Academy, Grissom Library and Denbigh Municipal Annex, Fire Station #008, Public Safety Building, Video Production, West Avenue Library and old Fire Station #003.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$500,000**
PROJECT COST:						
Construction	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
Project Total:	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$500,000**

IMPACT ON OPERATING BUDGET: Deferred maintenance results in increased costs associated with pavement failure and increased need for base stabilization prior to re-paving.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Lot repaving will improve user satisfaction and mininmize the possibility for vehicle or equipment damage caused by potholes or broken pavement. Improvements completed under this program are anticipated to result in overall user opinion of the facility site in general.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Security Video System Upgrade and Maintenance		
DEPARTMENT:	Public Works		
CONTACT PERSON:	Yan Byalik	**PHONE:**	757-926-7476
PROJECT LOCATION:	Security Services		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Public Buildings			Mandated/Legal Requirement	
TOTAL ESTIMATED COST:	$400,000		**NEW PROJECT:**	Y	

PROJECT DESCRIPTION and/or JUSTIFICATION: The current security video system is comprised of cameras, software for operating the cameras, servers for storing the video recordings, and a robust digital network for streaming and recording video from the cameras to the servers. The deterioration of any part of this system will result in the deterioration of the capabilities of the entire system including the ability to detect and investigate incidents of loss at city facilities.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$100,000	$100,000	$100,000	$100,000	**$400,000**
Funding Source Total:	**-**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$400,000**
PROJECT COST:						
Other		$100,000	$100,000	$100,000	$100,000	**$400,000**
Project Total:	**-**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$400,000**

IMPACT ON OPERATING BUDGET: A portion of these funds will be used for a comprehensive video maintenance plan with the City's video vendor. This would significantly reduce the cost of unforeseen repair costs to the City's 480+ cameras. Currently, as many as 80 cameras are inoperable, outdated and in need of maintenance at any given time. The vendor charges $99 per hour for repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The funds would be used for continual upgrades to this system, ensuring that the system can be reliable and dependable enough to serve its two primary functions: detection of incidents before major losses occur and investigation of incidents after a loss for prosecution or civil action. A robust video security system is vital to the City's emphasis on public safety in City facilities.

PUBLIC BUILDINGS CAPITAL PROJECT

PROJECT NAME:	Virgil I. Grissom Library New Building
DEPARTMENT:	Libraries and Information Services
CONTACT PERSON:	Izabela M. Cieszynski
PHONE:	7579261350
PROJECT LOCATION:	Part of the initial design phase will include identifying the location in the northern part of the City along a major thoroughfare.

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Public Buildings
TOTAL ESTIMATED COST:	$12,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Grissom Library was built in 1976 and has never undergone a major renovation, remodeling or expansion. The 16,335 square foot building provides both public and staff space in the public library area and 5,995 square feet in the basement that is now used by the Friends of the Library for book sales and book selling operations. The Friends were moved to ADA accessible Grissom basement with the closing of West Avenue Library. Grissom is the only City library north of J. Clyde Morris Boulevard. In surveys conducted in prior years, citizens have commented on the need for a larger facility. In FY 2014, Grissom Library had 354,663 items checked out by library customers in the building; 80,654 reference and research assists in the building; and over 265,000 library customers walking in the doors.

High usage by Newport News residents of the York County Public Library is a continuing concern. In FY 2011, more than 13,880 Newport News residents were registered with the York County Public Library (represents approximately 20% of York County's total registered users). At year-end FY 2015, the number of registered Newport News residents using the York County Public Library had risen to 14,039 and at least one retirement community in Newport News is now using York County Public Library as its primary library.

The Library and Space Needs Facility Committee conducted a study in 2008 and recommended between 31,732 square feet to 34,234 square feet depending on which option was ultimately selected. Current library construction costs are estimated at $300 - $430 per square foot.

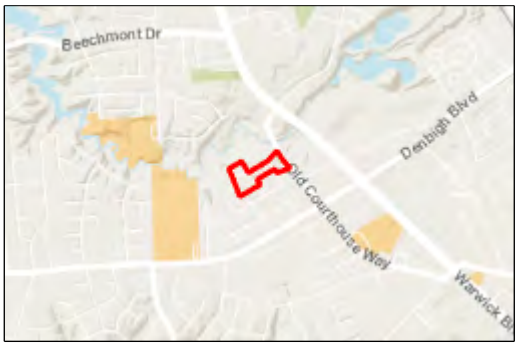
In FY 2014, an existing Facility Conditions Survey and Master Plan indicated that, while the current building remains a structurally sound facility capable of renovation and expansion, the facility needs major structural, mechanical, electrical, and plumbing upgrades or replacement to continue to efficiently and effectively serve the public. The costs detailed below do not include land/site acquisition.

FY 2019 - Design of new library facility and site acquisition.
FY 2020 - Begin construction of new library (total construction cost estimated at $12 million).
FY 2021 - Completion of construction.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$800,000	$6,000,000	$5,200,000	**$12,000,000**
Funding Source Total:	**-**	**-**	**$800,000**	**$6,000,000**	**$5,200,000**	**$12,000,000**
PROJECT COST:						
Construction				$6,000,000	$3,400,000	**$9,400,000**
Contingency					$900,000	**$900,000**
Other					$900,000	**$900,000**
Planning/Design			$800,000			**$800,000**
Project Total:	**-**	**-**	**$800,000**	**$6,000,000**	**$5,200,000**	**$12,000,000**

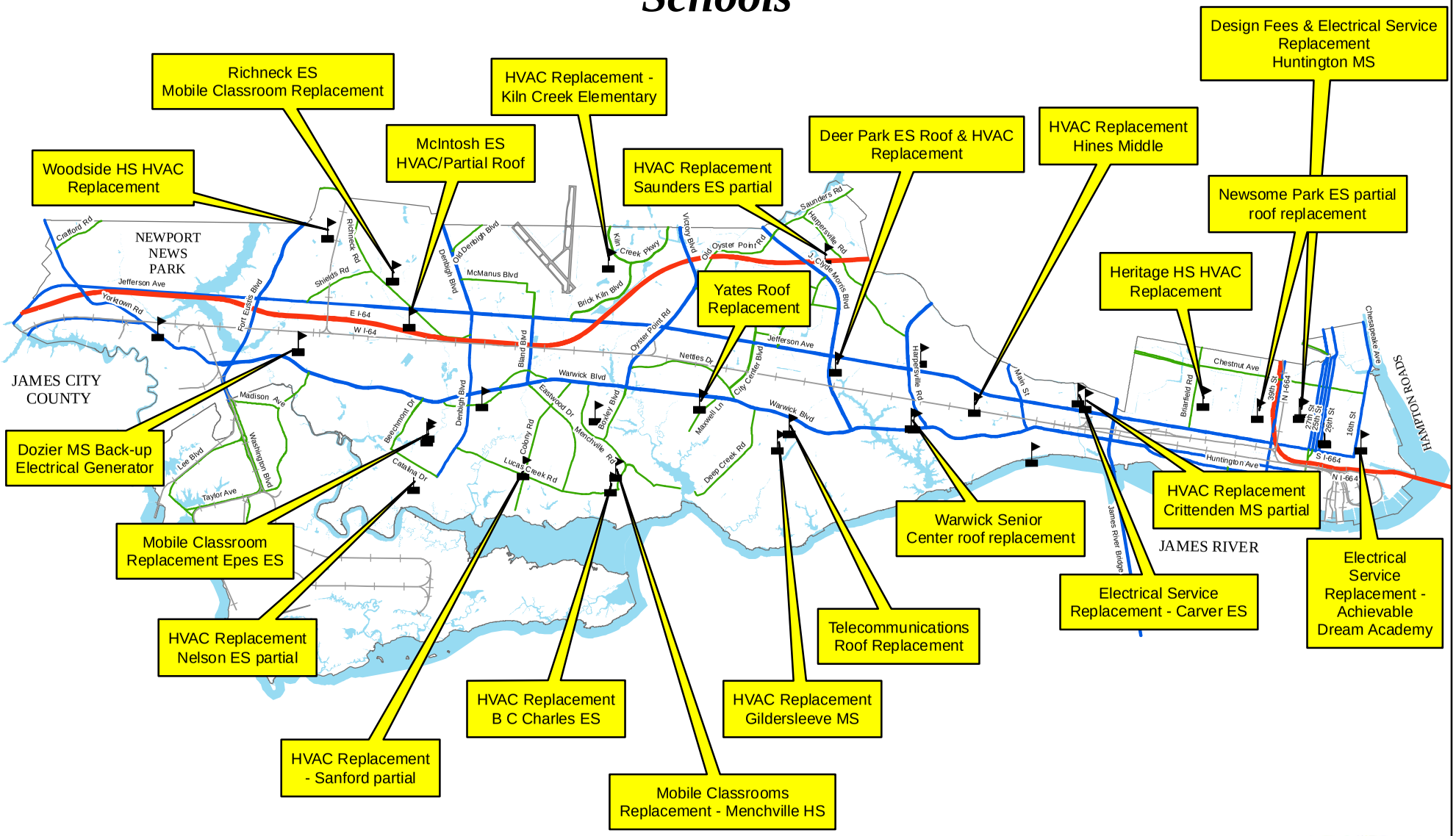
IMPACT ON OPERATING BUDGET: There would be no impact on the operating budget until FY 2021.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: 1. Citizens in the north end of the City will have improved access to library services through an expanded physical place.
2. Currently, the York County Library pays the Williamsburg Regional Library for its use by York County residents. If the number of registered Newport News residents continues to grow at the York County Public Library, Newport News may find itself having to pay an annual cost for its residents.



SCHOOLS

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Schools



Citywide

Bus Replacement

SCHOOLS

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Bus Replacement	$2,000,000	$2,000,000	$2,000,000	$2,500,000	$2,500,000	**$11,000,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$2,000,000**	**$2,000,000**	**$2,000,000**	**$2,500,000**	**$2,500,000**	**$11,000,000**
GEN OBLIGATION BOND (GOB)						
Design Fees - HVAC and roofs	$486,000	$536,000	$832,000	$636,000	$732,000	**$3,222,000**
GOB Adjustment	$0	$0	($2,000,000)	($4,000,000)	($2,600,000)	**($8,600,000)**
HVAC Replacement - BC Charles Elementary	$0	$0	$300,000	$0	$0	**$300,000**
HVAC Replacement - Carver Elementary	$2,500,000	$0	$0	$0	$0	**$2,500,000**
HVAC Replacement - Deer Park Elementary	$0	$0	$2,600,000	$0	$0	**$2,600,000**
HVAC Replacement - Gildersleeve Middle	$0	$0	$0	$2,000,000	$0	**$2,000,000**
HVAC Replacement - Hidenwood Elementary	$0	$2,000,000	$0	$0	$0	**$2,000,000**
HVAC Replacement - Hilton Elementary	$0	$0	$0	$900,000	$0	**$900,000**
HVAC Replacement - Hines Middle	$0	$0	$0	$2,000,000	$0	**$2,000,000**
HVAC Replacement - Kiln Creek Elementary	$0	$0	$0	$2,600,000	$0	**$2,600,000**
HVAC Replacement - Lee Hall Elementary	$2,200,000	$0	$0	$0	$0	**$2,200,000**
HVAC Replacement - Marshall Early Learning Center	$0	$0	$2,400,000	$0	$0	**$2,400,000**
HVAC Replacement - Richneck Elementary	$0	$0	$0	$0	$2,600,000	**$2,600,000**
HVAC Replacement - Riverside Elementary	$0	$2,600,000	$0	$0	$0	**$2,600,000**
HVAC Replacement - Sedgefield Elementary	$0	$0	$2,500,000	$0	$0	**$2,500,000**
HVAC Replacement - Telecommunications Facility	$0	$0	$0	$550,000	$0	**$550,000**
HVAC Replacement - Yates Elementary	$0	$0	$0	$2,000,000	$0	**$2,000,000**
*HVAC Replacement - Woodside High School	$0	$0	$0	$0	$5,000,000	**$5,000,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$5,186,000**	**$5,136,000**	**$6,632,000**	**$6,686,000**	**$5,732,000**	**$29,372,000**
SCHOOLS TOTAL:	***$7,186,000***	***$7,136,000***	***$8,632,000***	***$9,186,000***	***$8,232,000***	***$40,372,000***

SCHOOLS

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Bus Replacement	$2,000,000	$2,000,000	$2,500,000	$2,500,000	$2,500,000	**$11,500,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$2,000,000**	**$2,000,000**	**$2,500,000**	**$2,500,000**	**$2,500,000**	**$11,500,000**
GEN OBLIGATION BOND (GOB)						
HVAC Replacement - BC Charles Elementary	$0	$0	$0	$0	$440,000	**$440,000**
HVAC Replacement - Deer Park Elementary	$0	$0	$0	$2,200,000	$0	**$2,200,000**
HVAC Replacement - Gildersleeve Middle	$2,200,000	$0	$0	$0	$0	**$2,200,000**
HVAC Replacement - Hines Middle	$2,200,000	$0	$0	$0	$0	**$2,200,000**
HVAC Replacement - Kiln Creek Elementary	$0	$0	$0	$0	$2,800,000	**$2,800,000**
HVAC Replacement - Woodside High School	$0	$0	$5,500,000	$0	$0	**$5,500,000**
*Deer Park ES roof replacement	$0	$0	$0	$0	$973,000	**$973,000**
*Design Fees - Huntington MS	$0	$0	$0	$2,718,000	$0	**$2,718,000**
*Dozier back-up electrical generator	$0	$0	$0	$66,000	$0	**$66,000**
*Electrical Service Replacement - Achievable Dream Academy	$0	$0	$77,000	$0	$0	**$77,000**
*Electrical Service Replacement - Carver ES	$0	$0	$77,000	$0	$0	**$77,000**
*Electrical Service Replacement - Huntington MS	$0	$77,000	$77,000	$0	$0	**$154,000**
*HVAC Replacement - Crittenden MS partial	$0	$0	$0	$0	$99,000	**$99,000**
*HVAC Replacement - Heritage HS	$0	$5,500,000	$0	$0	$0	**$5,500,000**
*HVAC Replacement - McIntosh ES partial	$0	$0	$0	$198,000	$0	**$198,000**
*HVAC Replacement - Nelson ES partial	$0	$550,000	$0	$0	$0	**$550,000**
*HVAC Replacement - Sanford partial	$0	$0	$0	$550,000	$0	**$550,000**
*HVAC Replacement - Saunders ES partial	$0	$0	$0	$0	$1,170,000	**$1,170,000**
*McIntosh partial roof replacement	$0	$0	$138,500	$0	$0	**$138,500**
*Mobile Classroom Replacement - Epes ES	$125,000	$0	$0	$0	$0	**$125,000**
*Mobile Classroom Replacement - Richneck ES	$0	$0	$125,000	$0	$0	**$125,000**
*Mobile Classrooms Replacement - Menchville HS	$0	$0	$0	$0	$250,000	**$250,000**
*Newsome Park ES partial roof replacement	$0	$0	$561,000	$0	$0	**$561,000**
*Telecommunications roof replacement	$0	$0	$130,500	$0	$0	**$130,500**
*Warwick HS Senior Center roof replacement	$0	$505,000	$0	$0	$0	**$505,000**
*Yates roof replacement	$611,000	$0	$0	$0	$0	**$611,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$5,136,000**	**$6,632,000**	**$6,686,000**	**$5,732,000**	**$5,732,000**	**$29,918,000**
SCHOOLS TOTAL:	***$7,136,000***	***$8,632,000***	***$9,186,000***	***$8,232,000***	***$8,232,000***	***$41,418,000***

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Bus Replacement
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith Webb
PHONE:	8815024
PROJECT LOCATION:	Division-wide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$11,500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Based on transportation best practices, school buses should be replaced no later than 15 years after being placed in service. To achieve this, NNPS should replace 23 buses each year out of its 347 bus fleet. However, additional buses are required to address inadequate funding of this budget line item in past years. There are currently 59 buses at the 15 year mark and 45 at the 16 year mark. This budget request increases the replacement to an average of 35 buses annually in an effort to return to a 15 year replacement cycle.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$2,000,000	$2,000,000	$2,500,000	$2,500,000	$2,500,000	**$11,500,000**
Funding Source Total:	**$2,000,000**	**$2,000,000**	**$2,500,000**	**$2,500,000**	**$2,500,000**	**$11,500,000**
PROJECT COST:						
Other	$2,000,000	$2,000,000	$2,500,000	$2,500,000	$2,500,000	**$11,500,000**
Project Total:	**$2,000,000**	**$2,000,000**	**$2,500,000**	**$2,500,000**	**$2,500,000**	**$11,500,000**

IMPACT ON OPERATING BUDGET: There will be a reduction in maintenance and operating expenses.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Replacement will ensure that the buses are not lost for service due to irreparable mechanical failure or structural fatigue.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Deer Park ES roof replacement
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	11541 Jefferson Avenue

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$973,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The current 3-tab shingle roof was installed in 1996 when the building was completely renovated along with a fire-treated roof gable rafter system being added. Due to the deterioration of the wood structure, walking on the roof for maintenance has caused several breakthroughs of the sheathing below the shingles. Due to attic heat, the shingles are starting to become brittle and break.

When this project is funded, the roof will be 22 years old. It is past the industry accepted service life of 20 years. Additionally, warranty on shingle roofs is pro-rated based on age. No value is derived from warranty at its current age. This building sits at one of the most prominent intersections in the city, J. Clyde Morris Blvd and Jefferson Avenue, making its appearance important to the City's image.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$973,000	**$973,000**
Funding Source Total:	-	-	-	-	**$973,000**	**$973,000**
PROJECT COST:						
Construction					$973,000	**$973,000**
Project Total:	-	-	-	-	**$973,000**	**$973,000**

IMPACT ON OPERATING BUDGET: The School Division spends significant effort and expense repairing and maintaining this roofing system. Substantial cost reductions can be expected on an annual basis.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: A watertight roof is essential to maintaining the integrity of the building structure as well as the contents therein. Roof leaks are a cause of physical interior damage. Mold and mildew, until successfully addressed, causes students to be sent home, which disrupts instruction and family life.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Design Fees - Huntington MS
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith Webb
PHONE:	8815024
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$2,718,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project provides for the design of a replacement facility for this former high school. As a middle school with a planned enrollment of 1,000 students, it was built to accommodate 1,800 students. It is too large and poorly designed to best accommodate a modern middle school program. The maintenance and operating costs are disproportional to the current program's need. Based on the newest addition, constructed in 1969, this facility will be 51 years old when this aspect of the project is complete. The oldest sections of the building date to 1936 making them 84 years old. Industry accepted useful life for a building is 50 years without a major renovation which Huntington has never had. This facility is used extensively by the community.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)				$2,718,000		**$2,718,000**
Funding Source Total:	**-**	**-**	**-**	**$2,718,000**	**-**	**$2,718,000**
PROJECT COST:						
Construction						**-**
Planning/Design				$2,718,000		**$2,718,000**
Project Total:	**-**	**-**	**-**	**$2,718,000**	**-**	**$2,718,000**

IMPACT ON OPERATING BUDGET: None.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project allows for timely planning, purchasing, and execution of a new replacement middle school.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Dozier back-up electrical generator
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	432 Industrial Park Drive

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$66,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The current generator, which serves the emergency lighting circuits, is original to the 1974 building making it 46 years old at time of funding. The industry expected useful life of an electrical generator is 15 years making this unit far in excess of its useful life.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)				$66,000		**$66,000**
Funding Source Total:	**-**	**-**	**-**	**$66,000**	**-**	**$66,000**
PROJECT COST:						
Construction				$66,000		**$66,000**
Project Total:	**-**	**-**	**-**	**$66,000**	**-**	**$66,000**

IMPACT ON OPERATING BUDGET: A newer generator will burn fuel more efficiently hence reduce fuel consumption as well as lower emissions.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: A new generator will provide a more reliable source of emergency power generation for the emergency lighting needed during times of power outages.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Electrical Service Replacement - Achievable Dream Academy
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	726 16th Street

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$77,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The main electrical service in this facility is original to the 1961 building. Failure of this equipment could cause school disruption and possible physical damage to the building. Depending on the nature of failure, human life might be endangered. The industry accepted average useful life for a main electrical service is 40 years. At the time of funding for this project, the service will be 58 years old.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$77,000			**$77,000**
Funding Source Total:	**-**	**-**	**$77,000**	**-**	**-**	**$77,000**
PROJECT COST:						
Construction			$77,000			**$77,000**
Project Total:	**-**	**-**	**$77,000**	**-**	**-**	**$77,000**

IMPACT ON OPERATING BUDGET: The project is driven by safety considerations, not operational cost factors.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will remove safety hazards and make the electrical system reliable until the building is replaced.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Electrical Service Replacement - Carver ES
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	6160 Jefferson Avenue

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$77,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The main electrical service in this facility was last updated in 1975. Failure of this equipment could cause school disruption and possible physical damage to the building. Depending on the nature of failure, human life might be endangered. The industry accepted average useful life for a main electrical service is 40 years. At the time of funding for this project, the service will be 44 years old.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$77,000			**$77,000**
Funding Source Total:	**-**	**-**	**$77,000**	**-**	**-**	**$77,000**
PROJECT COST:						
Construction			$77,000			**$77,000**
Project Total:	**-**	**-**	**$77,000**	**-**	**-**	**$77,000**

IMPACT ON OPERATING BUDGET: The project is driven by safety considerations, not operational cost factors.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will remove safety hazards and make the main electrical system reliable until the building is replaced.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Electrical Service Replacement - Huntington MS
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	3401 Orcutt Avenue

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$154,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The main electrical services in this facility are original to the 1969 addition. Failure of this equipment could cause school disruption and possible physical damage to the building. Depending on the nature of failure, human life might be endangered. The industry accepted average useful life for a main electrical service is 40 years. At time of funding for this project, the service will be 49 years old.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$77,000	$77,000			**$154,000**
Funding Source Total:	**-**	**$77,000**	**$77,000**	**-**	**-**	**$154,000**
PROJECT COST:						
Construction		$77,000	$77,000			**$154,000**
Project Total:	**-**	**$77,000**	**$77,000**	**-**	**-**	**$154,000**

IMPACT ON OPERATING BUDGET: The project is driven by safety considerations, not operational cost factors.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will remove safety hazards and make the main electrical system reliable until the building is replaced.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - BC Charles Elementary
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith Webb
PHONE:	8815024
PROJECT LOCATION:	701 Menchville Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$440,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project involves the replacement of the roof top mounted HVAC covering the cafeteria, gymnasium and main office. This equipment was not replaced when the rest of the facility HVAC was replaced in 2007 due to funding constraints. The equipment being replaced was installed in 1996. This makes it older than its industry accepted life cycle of 15 years for air conditioning and 20 years for heating components. Equipment of this nature and size is not stocked and thus must be manufactured upon order. Lead time can stretch into months. During that time, rental equipment must be used at a higher expense than normal operating expenses.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$440,000	**$440,000**
Funding Source Total:	**-**	**-**	**-**	**-**	**$440,000**	**$440,000**
PROJECT COST:						
Construction					$440,000	**$440,000**
Project Total:	**-**	**-**	**-**	**-**	**$440,000**	**$440,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining these HVAC systems. Substantial cost reductions can be expected on an annual basis. Additionally, higher efficiency equipment will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Crittenden MS partial
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	6158 Jefferson Avenue

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$99,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will provide air conditioning to the 1956 constructed gymnasium. No air conditioning currently exists.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$99,000	**$99,000**
Funding Source Total:	**-**	**-**	**-**	**-**	**$99,000**	**$99,000**
PROJECT COST:						
Construction					$99,000	**$99,000**
Project Total:	**-**	**-**	**-**	**-**	**$99,000**	**$99,000**

IMPACT ON OPERATING BUDGET: There will be an increased cost in the utility budget since there is currently no expense to cool in the hot months. There will be an increased expense associated with preventative maintenance on the equipment.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Lack of air conditioning causes students to be sent home which disrupts instruction and family life. No air conditioning limits the use of the space by the community as well.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Deer Park Elementary
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith Webb
PHONE:	8815024
PROJECT LOCATION:	11541 Jefferson Avenue

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$2,200,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace existing unit ventilators with water source heat pumps to provide heating and cooling. A separate system for the cafeteria and auditorium areas to better accommodate after-hours use will be installed. The project will replace equipment installed in 1994. The equipment will be 23 years old by the time this project is funded. This is beyond the industry accepted life cycles of 15 years for cooling equipment and 20 years for heating equipment.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)				$2,200,000		**$2,200,000**
Funding Source Total:	**-**	**-**	**-**	**$2,200,000**	**-**	**$2,200,000**
PROJECT COST:						
Construction				$2,200,000		**$2,200,000**
Project Total:	**-**	**-**	**-**	**$2,200,000**	**-**	**$2,200,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining these HVAC systems and substantial cost reductions can be expected on an annual basis. Higher efficiency equipment will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Gildersleeve Middle
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	8815024
PROJECT LOCATION:	1 Minton Drive

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$2,200,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace rooftop 1989 vintage HVAC units with a fresh air intake system and an upgrade of controls to Direct Digital Control (DDC). Current units require increasing maintenance and the control system does not allow operation of the building in smaller segments than entire wings. Additionally, the fresh air system will improve air quality through positive pressure and introduction of outside air to meet current ASHRAE standards. The project includes replacement of boilers and pumps. By the time this project is funded, the equipment will be 28 years old which is well past the industry accepted life cycle of 15 years for cooling and 20 years for heating equipment.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$2,200,000					**$2,200,000**
Funding Source Total:	**$2,200,000**	**-**	**-**	**-**	**-**	**$2,200,000**
PROJECT COST:						
Construction	$2,200,000					**$2,200,000**
Project Total:	**$2,200,000**	**-**	**-**	**-**	**-**	**$2,200,000**

IMPACT ON OPERATING BUDGET: There will be a reduction in maintenance, labor and materials costs. Energy consumption may be reduced through enabling smaller sections of the building to run when otherwise unoccupied.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Heritage HS
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	5800 Marshall Avenue

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

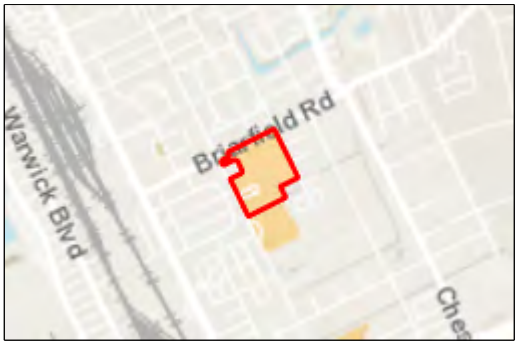
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$5,500,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The HVAC equipment in this facility is original to the 1996 construction making it 21 years old at the time of project funding. This is past the industry accepted useful life of 20 years. Currently, HVAC operation is sporadic due to failures of the in-room airflow devices (VAV boxes), as well as DDC control issues that were not overcome by a 2006 replacement. The roof top mounted equipment is difficult to find repair parts for without a lengthy lead time. This school is used extensively by the community.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$5,500,000				**$5,500,000**
Funding Source Total:	**-**	**$5,500,000**	**-**	**-**	**-**	**$5,500,000**
PROJECT COST:						
Construction		$5,500,000				**$5,500,000**
Project Total:	**-**	**$5,500,000**	**-**	**-**	**-**	**$5,500,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining these HVAC systems. Substantial cost reductions can be expected on an annual basis. Additionally, higher efficiency equipment will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Hines Middle
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	8815024
PROJECT LOCATION:	561 McLawhorne Drive

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

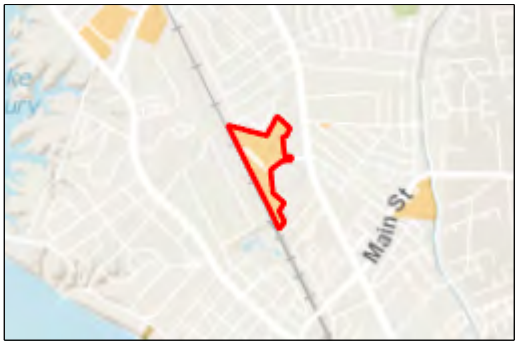
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$2,200,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project consists of replacing the rooftop 1989 vintage HVAC units with a fresh air intake system and upgrade of controls to Direct Digital Control (DDC). Current units require increasing maintenance and the control system does not allow operation of the building in smaller segments than entire wings. Additionally, the fresh air system will improve air quality through positive pressure and an introduction of outside air to meet current ASHRAE standards. The project includes replacement of boilers and pumps. By the time this project is funded, the equipment will be 28 years old which is well past the industry accepted life cycle of 15 years for cooling and 20 years for heating equipment.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$2,200,000					**$2,200,000**
Funding Source Total:	**$2,200,000**	**-**	**-**	**-**	**-**	**$2,200,000**
PROJECT COST:						
Construction	$2,200,000					**$2,200,000**
Project Total:	**$2,200,000**	**-**	**-**	**-**	**-**	**$2,200,000**

IMPACT ON OPERATING BUDGET: At the completion of the project, there will be reduced maintenance, labor and materials costs. Energy consumption may be reduced through enabling smaller sections of the building to run when otherwise unoccupied.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Kiln Creek Elementary
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	8815024
PROJECT LOCATION:	1501 Kiln Creek Parkway

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$2,800,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace the entire system with water source heat pumps to include pumps and upgraded Direct Digital Controls (DDC). The equipment was installed in 1991. By the time this project is funded, the equipment will be 29 years old which is well past the industry accepted life cycle of 15 years for cooling and 20 years for heating equipment. This school was also built as part of a planned community and as such the community uses the facility extensively.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$2,800,000	**$2,800,000**
Funding Source Total:	**-**	**-**	**-**	**-**	**$2,800,000**	**$2,800,000**
PROJECT COST:						
Construction					$2,800,000	**$2,800,000**
Project Total:	**-**	**-**	**-**	**-**	**$2,800,000**	**$2,800,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining these HVAC systems. Substantial cost reductions can be expected on an annual basis. Additionally, higher efficiency equipment will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - McIntosh ES partial
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	185 Richneck Road

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

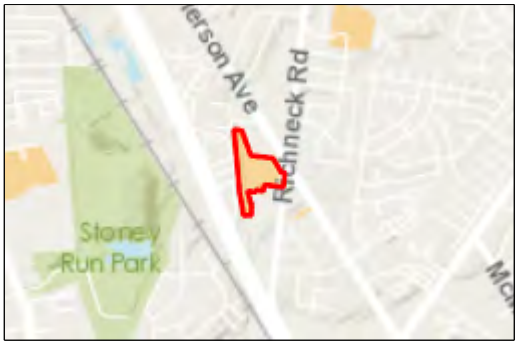
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$198,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace all the heat pump units in the pre-engineered building constructed in 2001. At time of project funding, the units will be 19 years old which is past their industry accepted useful life of 15 years. Refrigerant used in repairs is no longer manufactured and is quite expensive in the aftermarket.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)				$198,000		**$198,000**
Funding Source Total:	**-**	**-**	**-**	**$198,000**	**-**	**$198,000**
PROJECT COST:						
Construction				$198,000		**$198,000**
Project Total:	**-**	**-**	**-**	**$198,000**	**-**	**$198,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining these HVAC systems. Substantial cost reductions can be expected on an annual basis. Additionally, higher efficiency equipment will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Nelson ES partial
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	826 Moyer Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

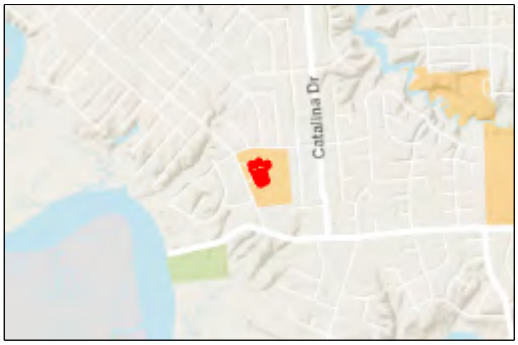
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$550,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: This project replaces all circa 1998 roof top HVAC units. At an industry expected life of 15 years, these units will be 20 years old at time of funding. The refrigerant used in making repairs is no longer manufactured and is quite expensive in the aftermarket.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$550,000				**$550,000**
Funding Source Total:	**-**	**$550,000**	**-**	**-**	**-**	**$550,000**
PROJECT COST:						
Construction		$550,000				**$550,000**
Project Total:	**-**	**$550,000**	**-**	**-**	**-**	**$550,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining these HVAC systems. Substantial cost reductions can be expected on an annual basis. Additionally, higher efficiency equipment will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Sanford partial
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	480 Colony Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

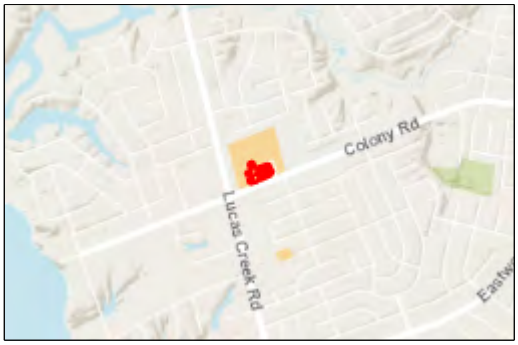
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$550,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace all circa 1999 roof top HVAC units on this total electric school. At an industry expected life of 15 years, these units will be 19 years old at the time of funding. The refrigerant used in making repairs is no longer manufactured and is quite expensive in the aftermarket.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)				$550,000		**$550,000**
Funding Source Total:	**-**	**-**	**-**	**$550,000**	**-**	**$550,000**
PROJECT COST:						
Construction				$550,000		**$550,000**
Project Total:	**-**	**-**	**-**	**$550,000**	**-**	**$550,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining these HVAC systems. Substantial cost reductions can be expected on an annual basis. Additionally, higher efficiency equipment will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Saunders ES partial
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	853 Harpersville Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

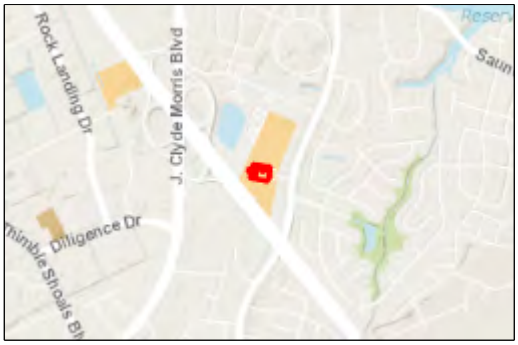
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$1,170,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace all roof top mounted equipment installed in 2000. At the time of project funding, the equipment will be 21 years old which is past the industry accepted useful life of 15 years. Refrigerant used to make repairs is no longer manufactured and is quite expensive in the aftermarket.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$1,170,000	**$1,170,000**
Funding Source Total:	**-**	**-**	**-**	**-**	**$1,170,000**	**$1,170,000**
PROJECT COST:						
Construction					$1,170,000	**$1,170,000**
Project Total:	**-**	**-**	**-**	**-**	**$1,170,000**	**$1,170,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining these HVAC systems. Substantial cost reductions can be expected on an annual basis. Additionally, higher efficiency equipment will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	HVAC Replacement - Woodside High School
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith Webb
PHONE:	881-5024
PROJECT LOCATION:	13450 Woodside Lane

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$5,500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace the rooftop equipment, boilers, pumps, VAV components, DDC system and increase HVAC to all computer labs within the school. Also, it replaces equipment installed when the school was built in 1996. At the time funding is secured, the equipment will be 23 years old which is past the industry accepted life cycle of 15 years for cooling and 20 years for heating equipment. Upon failure, equipment of this size and nature is not stocked and must be manufactured upon order. Lead time can stretch into months during which time rental equipment must be used at an expense higher than normal operating expenses. This school is used extensively by the community and some components are already starting to show fatigue or failure creating maintenance issues.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$5,500,000			**$5,500,000**
Funding Source Total:	**-**	**-**	**$5,500,000**	**-**	**-**	**$5,500,000**
PROJECT COST:						
Construction			$5,500,000			**$5,500,000**
Project Total:	**-**	**-**	**$5,500,000**	**-**	**-**	**$5,500,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing, maintaining and responding to occupant complaints. Substantial cost reductions can be expected on an annual basis with new equipment. Operating to failure is not a good operational decision since upon failure collateral damage may occur necessitating additional repairs at inflated costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Reliability of equipment enhances the likelihood of being able to conduct school on a daily basis. Lack of HVAC causes students to be sent home which disrupts instruction and family life.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	McIntosh partial roof replacement
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	185 Richneck Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

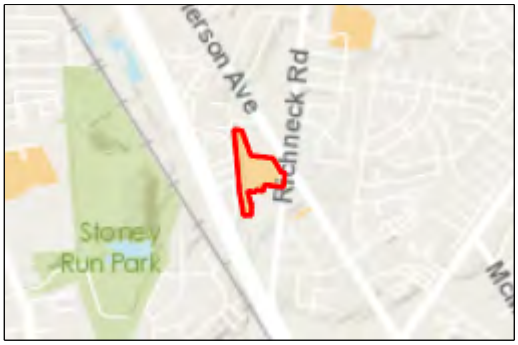
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$138,500
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: When the majority of the school roof was replaced in 1999, this section of roof was relatively new. At the time of funding, this partial roof will be 23 years old and outside the warranty period. Leaks are currently starting to occur with some regularity requiring warranty-covered repairs.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$138,500			**$138,500**
Funding Source Total:	**-**	**-**	**$138,500**	**-**	**-**	**$138,500**
PROJECT COST:						
Construction			$138,500			**$138,500**
Project Total:	**-**	**-**	**$138,500**	**-**	**-**	**$138,500**

IMPACT ON OPERATING BUDGET: The school division spends significant effort maintaining this roofing system warranty and associated claims. Cost reductions can be expected on an annual basis in the labor category. Additionally, an Energy Star rated membrane will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: A watertight roof is essential to maintaining the integrity of the building structure as well as the contents therein. Roof leaks are a cause of physical interior damage, mold and mildew, which until successfully addressed, causes students to be sent home which disrupts instruction and family life.



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Mobile Classroom Replacement - Epes ES		
DEPARTMENT:	Plant Services		
CONTACT PERSON:	Keith S. Webb	**PHONE:**	881-5024
PROJECT LOCATION:	855 Lucas Creek Road		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH	X		Community Renewal & Maint	
	CITYWIDE			Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	
PROJECT CATEGORY:	Schools			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$125,000	**NEW PROJECT:**	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace 1 mobile unit which dates to 1989. At current age and status, the existing unit requires significant work associated with leakage through windows and doors. HVAC units integral to the units are also past their useful life. Due to the temporary nature of the original construction, at 30 years old at the time of project funding, this unit is past its useful life.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$125,000					**$125,000**
Funding Source Total:	**$125,000**	**-**	**-**	**-**	**-**	**$125,000**
PROJECT COST:						
Construction	$125,000					**$125,000**
Project Total:	**$125,000**	**-**	**-**	**-**	**-**	**$125,000**

IMPACT ON OPERATING BUDGET: Maintenance, labor and materials are expended to repair or replace deteriorating finishes as well as system components like the HVAC system.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: New mobile units will not require replacement of finishes for several years thereby lessening the impact on the operating budget. More reliable HVAC units will lessen the likelihood of mold and mildew issues associated with non-functioning or poorly functioning systems

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Mobile Classroom Replacement - Richneck ES
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	205 Tyner Drive

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

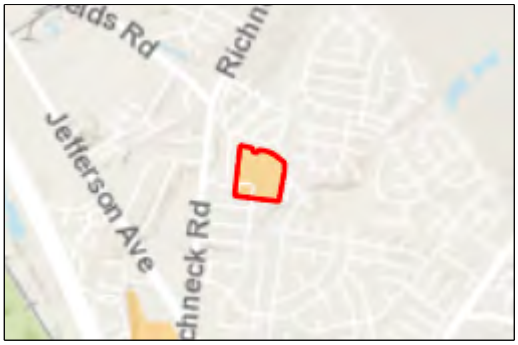
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$125,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace one mobile unit which dates to 1989. At current age and status, the existing unit requires significant work associated with leaks through windows and doors. HVAC units integral to the units are also past their useful life. Due to the temporary nature of the original construction, at 30 years old at the time of project funding, this unit is past its useful life.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$125,000			**$125,000**
Funding Source Total:	**-**	**-**	**$125,000**	**-**	**-**	**$125,000**
PROJECT COST:						
Construction			$125,000			**$125,000**
Project Total:	**-**	**-**	**$125,000**	**-**	**-**	**$125,000**

IMPACT ON OPERATING BUDGET: Maintenance, labor and materials are expended to repair or replace deteriorating finishes as well as system components like the HVAC system.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: New mobile units will not require replacement of finishes for several years thereby lessening the impact on the operating budget. More reliable HVAC units will lessen the likelihood of mold and mildew issues associated with non-functioning or poorly functioning systems



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Mobile Classrooms Replacement - Menchville HS
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	275 Menchville Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$250,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace two mobile units which date to 1982. At current age and status, the existing units require significant work associated with leaks through windows and doors. HVAC units integral to the units are also past their useful life. Due to the temporary nature of the original construction, at 37 years old at the time of project funding, this unit is past its useful life.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$250,000	**$250,000**
Funding Source Total:	-	-	-	-	**$250,000**	**$250,000**
PROJECT COST:						
Construction					$250,000	**$250,000**
Project Total:	-	-	-	-	**$250,000**	**$250,000**

IMPACT ON OPERATING BUDGET: Maintenance, labor and materials are expended to repair or replace deteriorating finishes as well as system components like the HVAC system.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: New mobile units will not require replacement of finishes for several years thereby lessening the impact on the operating budget. As well, more reliable HVAC units will lessen the likelihood of mold and mildew issues associated with non-functioning or poorly functioning systems.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Newsome Park ES partial roof replacement
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	4200 Marshall Avenue

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$561,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The majority of the school's roof was replaced in 2010. This section of the roof dates back to 1995 and it was not replaced at that time. At 24 years old at the time of project funding, this roof will have passed its 20 year warranty period.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$561,000			**$561,000**
Funding Source Total:	**-**	**-**	**$561,000**	**-**	**-**	**$561,000**
PROJECT COST:						
Construction			$561,000			**$561,000**
Project Total:	**-**	**-**	**$561,000**	**-**	**-**	**$561,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort maintaining this roofing system warranty and substantial labor cost reductions can be expected on an annual basis. Additionally, an Energy Star rated membrane will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: A watertight roof is essential to maintaining the integrity of the building structure as well as the contents therein. Roof leaks are a cause of physical interior damage, mold and mildew, which until successfully addressed, causes students to be sent home which disrupts instruction and family life.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Telecommunications roof replacement
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	4 Minton Drive

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

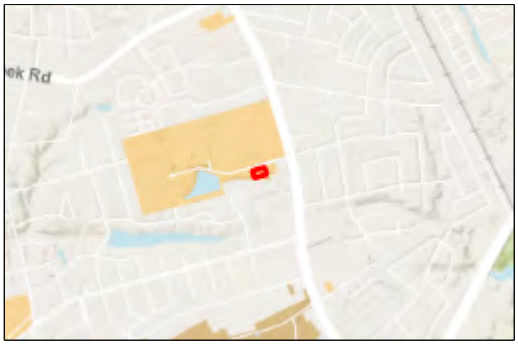
PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$130,500
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The capped standing seam metal roof has experienced on-going seam related problems as well as on-going flashing problems associated with tying into the masonry parapet walls. Numerous outside contractors have been unable to solve the problem on a lasting basis. The large quantity of television equipment in the building is sensitive to both direct water damage as well as indirect moisture issues. At the time of funding, this roof will be 29 years old.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$130,500			**$130,500**
Funding Source Total:	**-**	**-**	**$130,500**	**-**	**-**	**$130,500**
PROJECT COST:						
Construction			$130,500			**$130,500**
Project Total:	**-**	**-**	**$130,500**	**-**	**-**	**$130,500**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining this roofing system and substantial cost reductions can be expected on an annual basis. Additionally, an Energy Star rated membrane will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: A watertight roof is essential to maintaining the integrity of the building structure as well as the contents therein. Roof leaks are a cause of physical interior damage, mold and mildew, which until successfully addressed, causes students to be sent home which disrupts broadcasting, instruction and family life.



SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Warwick HS Senior Center roof replacement
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	1241 Gatewood Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$505,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: Since installation in 1992, the roof has experienced on-going problems not covered under warranty. At 26 years of age at the time of funding, the roof will exceed the normal 20 year warranted life which NNPS normally expects and past the industry accepted useful life of 25 years.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$505,000				**$505,000**
Funding Source Total:	**-**	**$505,000**	**-**	**-**	**-**	**$505,000**
PROJECT COST:						
Construction		$505,000				**$505,000**
Project Total:	**-**	**$505,000**	**-**	**-**	**-**	**$505,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining this roofing system and substantial cost reductions can be expected on an annual basis. Additionally, an Energy Star rated membrane will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: A watertight roof is essential to maintaining the integrity of the building structure as well as the contents therein. Roof leaks are a cause of physical interior damage, mold and mildew, which until successfully addressed, causes students to be sent home which disrupts instruction and family life.

SCHOOLS CAPITAL PROJECT

PROJECT NAME:	Yates roof replacement
DEPARTMENT:	Plant Services
CONTACT PERSON:	Keith S. Webb
PHONE:	881-5024
PROJECT LOCATION:	73 Maxwell Lane

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Schools
TOTAL ESTIMATED COST:	$611,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The existing roof was installed in 1991. Based on a recent thermographic analysis, the underlayment is waterlogged. The classrooms experience leaks on an on-going basis. Replacement will be with a highly reflective, Energy Star rated assembly. At the time of installation, the current roof was warranted for 20 years. At the time of project funding, the roof will be 26 years old which is past the industry expected life of 25 years and beyond what is safe given the additional weight caused by the water present.

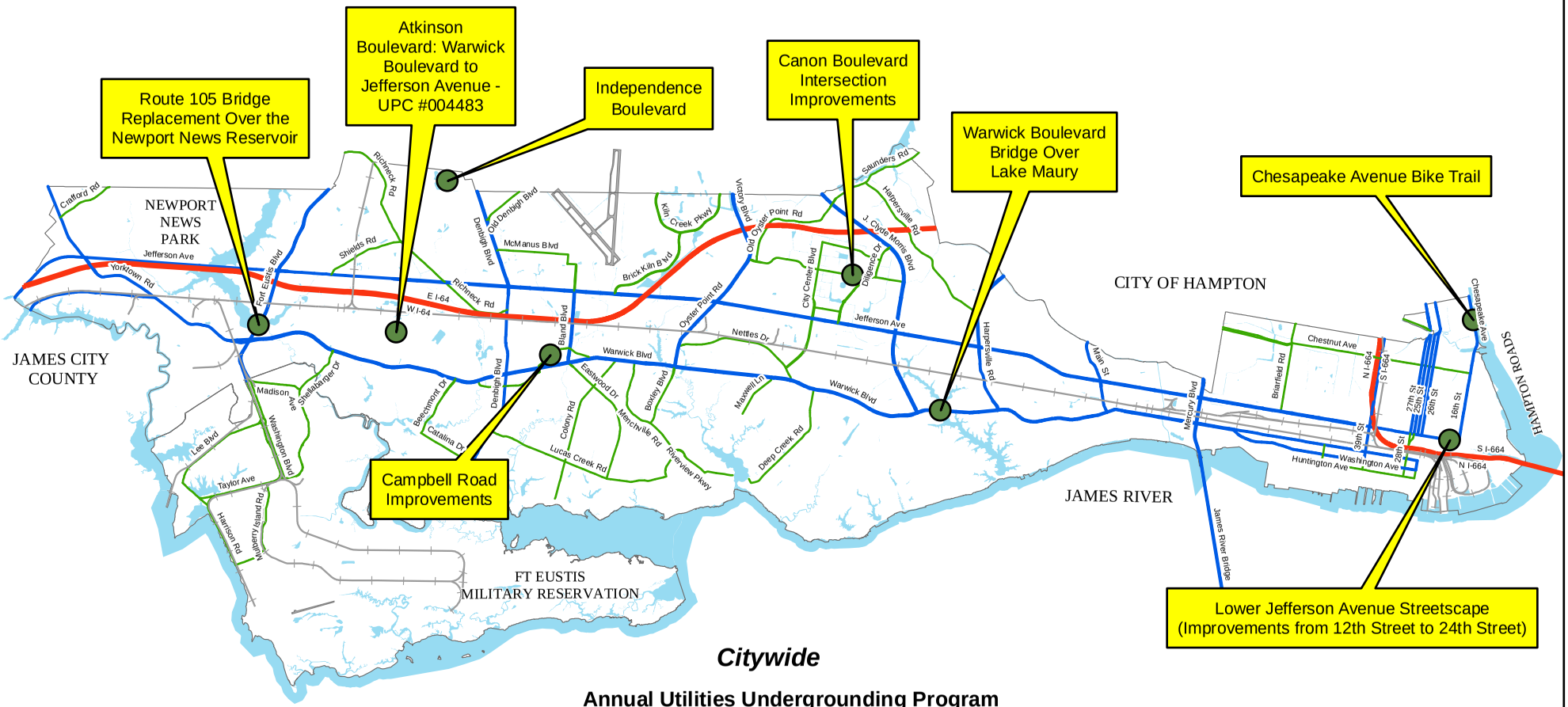
FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$611,000					**$611,000**
Funding Source Total:	**$611,000**	**-**	**-**	**-**	**-**	**$611,000**
PROJECT COST:						
Construction	$611,000					**$611,000**
Project Total:	**$611,000**	**-**	**-**	**-**	**-**	**$611,000**

IMPACT ON OPERATING BUDGET: The school division spends significant effort and expense repairing and maintaining this roofing system and substantial cost reductions can be expected on an annual basis. Additionally, an Energy Star rated membrane will greatly reduce heating and cooling costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: A watertight roof is essential to maintaining the integrity of the building structure as well as the contents therein. Roof leaks are a cause of physical interior damage, mold and mildew, which until successfully addressed, causes students to be sent home which disrupts instruction and family life.

STREETS AND BRIDGES

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Streets and Bridges



Citywide

Annual Utilities Undergrounding Program
Arterial Street Reconstruction and Resurfacing
Bright Lights, Safe Nights Street Lighting Program
Citywide Concrete Replacement Project
Neighborhood Enhancement Program
One Accessible City – Pedestrian, Bicycle & Road Safety Enhancement Program
Traffic Signal Installation and Upgrade Projects
Transportation Major Project Match
VDOT Project Support
Citywide Pedestrian Improvements at Traffic Signals
Intelligent Transportation System Upgrades
Traffic Signal Timing Improvements

Legend

Streets & Bridges

STREETS AND BRIDGES

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Arterial Street Reconstruction and Resurfacing	$1,500,000	$1,500,000	$1,500,000	$1,900,000	$2,000,000	**$8,400,000**
Citywide Concrete Replacement Project	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
VDOT Project Support	$25,000	$25,000	$25,000	$25,000	$25,000	**$125,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$2,025,000**	**$2,025,000**	**$2,025,000**	**$2,425,000**	**$2,525,000**	**$11,025,000**
GEN OBLIGATION BOND (GOB)						
Annual Utilities Undergrounding Program	$0	$0	$475,000	$475,000	$0	**$950,000**
Atkinson Boulevard	$0	$0	$5,555,300	$0	$0	**$5,555,300**
Bright Lights, Safe Nights Street Lighting Program (Formerly Streetlight Upgrade Projects)	$140,000	$140,000	$140,000	$140,000	$140,000	**$700,000**
Campbell Road Improvements	$0	$0	$955,000	$2,700,000	$0	**$3,655,000**
Canon Boulevard Intersection Improvements	$0	$0	$0	$0	$100,000	**$100,000**
Chesapeake Avenue Bike Trail	$0	$0	$70,000	$0	$0	**$70,000**
Huntington Avenue Bridge Replacement	$0	$1,192,500	$0	$0	$0	**$1,192,500**
Lower Jefferson Avenue Streetscape (Improvements from 12th Street to 24th Street)	$0	$0	$2,150,000	$1,911,000	$0	**$4,061,000**
Neighborhood Enhancement Program (Formerly Local Roadway Upgrade Program)	$300,522	$306,522	$313,022	$319,522	$326,522	**$1,566,110**
One Accessible City – Pedestrian, Bicycle & Road Safety Enhancement Program (Formerly Pedestrian and Road Safety Improvements)	$580,443	$609,443	$543,478	$670,443	$566,943	**$2,970,750**
Traffic Signal Installation and Upgrade Program	$358,249	$258,768	$507,871	$258,899	$416,182	**$1,799,969**
Transportation Major Project Match	$125,000	$125,000	$1,125,000	$3,750,000	$0	**$5,125,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$1,504,214**	**$2,632,233**	**$11,834,671**	**$10,224,864**	**$1,549,647**	**$27,745,629**
GRANT FUNDING						
Atkinson Boulevard	$9,785,000	$20,676,845	$15,118,448	$6,783,054	$0	**$52,363,347**
Campbell Road Improvements	$0	$0	$955,000	$2,700,000	$0	**$3,655,000**
Chesapeake Avenue Bike Trail	$0	$0	$400,000	$0	$0	**$400,000**
Huntington Avenue Bridge Replacement	$0	$1,192,500	$0	$0	$0	**$1,192,500**
Independence Boulevard	$0	$2,500,000	$2,500,000	$2,500,000	$2,500,000	**$10,000,000**
Lower Jefferson Avenue Streetscape (Improvements from 12th Street to 24th Street)	$0	$0	$2,150,000	$1,911,000	$0	**$4,061,000**
One Accessible City – Pedestrian, Bicycle & Road Safety Enhancement Program (Formerly Pedestrian and Road Safety Improvements)	$400,000	$400,000	$0	$400,000	$400,000	**$1,600,000**
Route 105 Bridge Replacement Over The Reservoir	$0	$0	$16,000,000	$0	$0	**$16,000,000**
Traffic Signal Installation and Upgrade Program	$150,000	$150,000	$150,000	$150,000	$150,000	**$750,000**
Transportation Major Project Match	$125,000	$125,000	$1,125,000	$3,750,000	$0	**$5,125,000**
TOTAL GRANT FUNDING:	**$10,460,000**	**$25,044,345**	**$38,398,448**	**$18,194,054**	**$3,050,000**	**$95,146,847**
OTHER						
Independence Boulevard	$0	$2,500,000	$2,500,000	$2,500,000	$2,500,000	**$10,000,000**
TOTAL OTHER:	**$0**	**$2,500,000**	**$2,500,000**	**$2,500,000**	**$2,500,000**	**$10,000,000**
STREETS AND BRIDGES TOTAL:	***$13,989,214***	***$32,201,578***	***$54,758,119***	***$33,343,918***	***$9,624,647***	***$143,917,476***

STREETS AND BRIDGES

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Arterial Street Reconstruction and Resurfacing	$1,500,000	$1,500,000	$1,900,000	$2,000,000	$2,100,000	**$9,000,000**
Canon Boulevard Intersection Improvements	$0	$0	$0	$0	$100,000	**$100,000**
Chesapeake Avenue Bike Trail	$100,000	$100,000	$0	$0	$0	**$200,000**
Citywide Concrete Replacement Project	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
VDOT Project Support	$25,000	$25,000	$25,000	$25,000	$25,000	**$125,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$2,125,000**	**$2,125,000**	**$2,425,000**	**$2,525,000**	**$2,725,000**	**$11,925,000**
GEN OBLIGATION BOND (GOB)						
Annual Utilities Undergrounding Program	$0	$475,000	$475,000	$0	$0	**$950,000**
Atkinson Boulevard: Warwick Boulevard to Jefferson Avenue - UPC #004483	$2,000,000	$1,575,000	$0	$0	$0	**$3,575,000**
Bright Lights, Safe Nights Street Lighting Program	$140,000	$140,000	$140,000	$140,000	$140,000	**$700,000**
Campbell Road Improvements	$0	$1,000,000	$2,750,000	$0	$0	**$3,750,000**
Lower Jefferson Avenue Streetscape (Improvements from 12th Street to 24th Street)	$2,250,000	$2,000,000	$0	$0	$0	**$4,250,000**
Neighborhood Enhancement Program	$306,522	$313,022	$319,522	$326,522	$326,522	**$1,592,110**
One Accessible City – Pedestrian, Bicycle & Road Safety Enhancement Program	$609,443	$543,478	$670,443	$566,943	$600,000	**$2,990,307**
Traffic Signal Installation and Upgrade Program	$329,000	$344,500	$360,000	$377,000	$394,000	**$1,804,500**
Transportation Major Project Match	$2,825,000	$1,125,000	$125,000	$2,375,000	$4,875,000	**$11,325,000**
*Warwick Boulevard Bridge over Lake Maury	$625,000	$0	$0	$0	$0	**$625,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$9,084,965**	**$7,516,000**	**$4,839,965**	**$3,785,465**	**$6,335,522**	**$31,561,917**
GRANT FUNDING						
Atkinson Boulevard: Warwick Boulevard to Jefferson Avenue - UPC #004483	$22,885,705	$11,043,448	$6,851,569	$0	$0	**$40,780,722**
Bright Lights, Safe Nights Street Lighting Program	$400,000	$0	$0	$0	$0	**$400,000**
Campbell Road Improvements	$0	$1,000,000	$2,750,000	$0	$0	**$3,750,000**
Chesapeake Avenue Bike Trail	$400,000	$400,000	$0	$0	$0	**$800,000**
Independence Boulevard	$125,000	$0	$2,500,000	$2,500,000	$2,500,000	**$7,625,000**
Lower Jefferson Avenue Streetscape (Improvements from 12th Street to 24th Street)	$2,250,000	$2,000,000	$0	$0	$0	**$4,250,000**
One Accessible City – Pedestrian, Bicycle & Road Safety Enhancement Program	$0	$400,000	$400,000	$400,000	$400,000	**$1,600,000**
Route 105 Bridge Replacement Over the Newport News Reservoir	$19,600,000	$0	$0	$0	$0	**$19,600,000**
Traffic Signal Installation and Upgrade Program	$225,000	$225,000	$225,000	$225,000	$225,000	**$1,125,000**
Transportation Major Project Match	$3,125,000	$1,125,000	$125,000	$2,375,000	$4,875,000	**$11,625,000**
*Citywide Pedestrian Improvements at Traffic Signals	$0	$250,000	$250,000	$500,000	$0	**$1,000,000**
*Intelligent Transportation System Upgrades	$60,000	$240,000	$0	$0	$0	**$300,000**
*Traffic Signal Timing Improvements	$300,000	$300,000	$300,000	$0	$0	**$900,000**
*Warwick Boulevard Bridge over Lake Maury	$625,000	$0	$0	$0	$0	**$625,000**
TOTAL GRANT FUNDING:	**$49,995,705**	**$16,983,448**	**$13,401,569**	**$6,000,000**	**$8,000,000**	**$94,380,722**
OTHER						
Independence Boulevard	$125,000	$0	$2,500,000	$2,500,000	$2,500,000	**$7,625,000**
Transportation Major Project Match	$300,000	$0	$0	$0	$0	**$300,000**
TOTAL OTHER:	**$425,000**	**$0**	**$2,500,000**	**$2,500,000**	**$2,500,000**	**$7,925,000**
STREETS AND BRIDGES TOTAL:	***$61,630,670***	***$26,624,448***	***$23,166,534***	***$14,810,465***	***$19,560,522***	***$145,792,639***

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Annual Utilities Undergrounding Program
DEPARTMENT:	Engineering
CONTACT PERSON:	David T. Wilkinson
PHONE:	(757) 926-8690
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$950,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Funding for the undergrounding of overhead utilities projects to better protect our vital infrastructure as well as fund other miscellaneous utility related efforts Citywide. Placing selected overhead power and communication poles and wire underground provides for improved safety of pedestrians, for the improved appearance of neighborhoods, and for the increased reliability of electric and communication systems.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$475,000	$475,000			**$950,000**
Funding Source Total:	**-**	**$475,000**	**$475,000**	**-**	**-**	**$950,000**
PROJECT COST:						
Construction		$475,000	$475,000			**$950,000**
Contingency						**-**
Internal Staff Cost						**-**
Project Total:	**-**	**$475,000**	**$475,000**	**-**	**-**	**$950,000**

IMPACT ON OPERATING BUDGET: None Identified

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Improved safety for pedestrians, improved appearance of neighborhoods, and increased reliability of electric and communication systems.

Citizen Impact: Removing the overhead utilities eliminates utility poles in close proximity to existing edge of travel lanes reducing the potential for fixed object crashes. Overhead utilities are unsightly and detract from the asthetics of our communities. Undergrounding the lines aids in creating more attractive gateways into our City and into the communities within our City. Relocating utilities underground greatly increases the reliability of these services to citizens by reducing the risk of service disruption due to down lines.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Arterial Street Reconstruction and Resurfacing
DEPARTMENT:	Engineering / Public Works
CONTACT PERSON:	Kenny Holloway
PHONE:	2692801
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$9,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project will contract street improvements for resurfacing of arterial/collector streets. Identified funding provides 50% of the funds required to continue programmed maintenance on major roadways. Planned efforts include contracted asphalt resurfacing and any required concrete repairs. Asphalt contract paving prices and mobilization charges have increased tremendously during the past few years. These projects now include funding for upgrading signalization to video detection for all intersections within the paving limits. ADA ramp replacement/upgrades are also included in the project totals as mandated by State/Federal regulations. In addition, this funding will be utilized to supplement revenue received from VDOT Primary Extension Paving Program. The arterial/collector network of streets has the greatest volume of traffic and a planned maintenance and rehabilitation schedule must be programmed for a continued high level of service.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$1,500,000	$1,500,000	$1,900,000	$2,000,000	$2,100,000	**$9,000,000**
Funding Source Total:	**$1,500,000**	**$1,500,000**	**$1,900,000**	**$2,000,000**	**$2,100,000**	**$9,000,000**
PROJECT COST:						
Construction	$1,500,000	$1,500,000	$1,900,000	$2,000,000	$2,100,000	**$9,000,000**
Project Total:	**$1,500,000**	**$1,500,000**	**$1,900,000**	**$2,000,000**	**$2,100,000**	**$9,000,000**

IMPACT ON OPERATING BUDGET: The Street Maintenance Division's operating funds will also be utilized in addition to this CIP request for a total resurfacing project cost of $3 - $4 million programmed per year. If this funding is not provided, the arterial/collector program will be affected. The asphalt costs on the paving contracts have doubled during the past five years and mobilization charges on these contracts are now being charged for each street. Without this additional funding being available to support the paving contracts, paving of arterial/collector roads may have to be reduced.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: As a result of this program, the City will be able to maintain and improve the Pavement Condition Index (PCI). An improved PCI helps to reduce future maintenance expenses on the City roadways. Asphalt resurfacing is an economical solution to maintaining roads that are durable, can be maintained at a low cost, and is recyclable. Resurfacing provides a better ride quality, safer streets, and shows the commitment the City has to providing great quality road infrastructure.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Atkinson Boulevard: Warwick Boulevard to Jefferson Avenue - UPC #004483
DEPARTMENT:	Engineering
CONTACT PERSON:	Kim Dugan
PHONE:	926-8616
PROJECT LOCATION:	From Warwick Boulevard to Jefferson Avenue

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$44,355,722
NEW PROJECT:	N

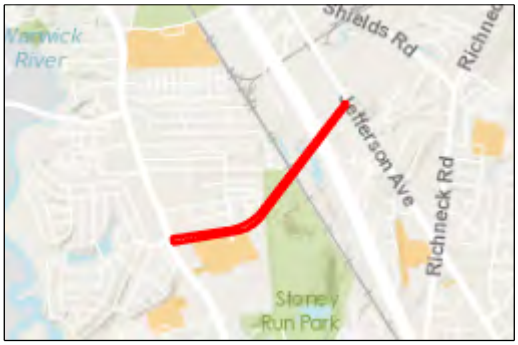
PROJECT DESCRIPTION and/or JUSTIFICATION: The City identified the need for this project in the late 1980s as an additional east/west crossing between Warwick Boulevard and Jefferson Avenue. In 1987, City Council requested that VDOT program a project to build the new four-lane, divided roadway. VDOT conducted a Location Public Hearing in 2007. The project is currently estimated to cost $64 million including design costs and previous expenditures by VDOT. Regional Surface Transportation Program (RSTP), Urban funding and now Revenue Sharing funding has been approved for this project. The RSTP funds must be obligated within one year of their allocation and expended within three years of their obligation or the funds become at-risk.

In FY17 & FY18 subject to City Council approval, City staff will apply for additional grant money needed to complete the funding demands for the project through the State process for Revenue Sharing funds. Preliminary engineering started in FY 2013 with right-of-way acquisition/utilities scheduled to start in FY 2015 and construction commencing in FY 2016. City Council will need to award approximately a $58 million construction contract in FY16 for the largest transportation project the City has undertaken to date.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$2,000,000	$1,575,000				**$3,575,000**
Grant Funding	$22,885,705	$11,043,448	$6,851,569			**$40,780,722**
Funding Source Total:	**$24,885,705**	**$12,618,448**	**$6,851,569**	**-**	**-**	**$44,355,722**
PROJECT COST:						
Construction	$24,885,705	$12,618,448	$6,851,569			**$44,355,722**
Other						**-**
Planning/Design						**-**
Site Acquisition						**-**
Project Total:	**$24,885,705**	**$12,618,448**	**$6,851,569**	**-**	**-**	**$44,355,722**

IMPACT ON OPERATING BUDGET: Upon completion of the project, maintenance will be required for associated improvements including a 1,600 foot bridge, 1.2 mile of additional four-lane pavement, multi-purpose trail, traffic signs, markings, streetlights, sewer, drainage, and landscaping.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The purpose is to improve the traffic network within the north end of the city improving accessibility for present traffic levels of service and possible future development. Traffic studies for the Atkinson corridor and surrounding street network predict a profound positive impact on the levels of service (reduced travel times) from the construction of this new east/west connector. Future traffic counts are predicted to demonstrate improved levels of service for the surrounding area including ingress/egress from Ft. Eustis. Future traffic counts will be required to verify traffic planning conclusions and economic growth of both existing and new businesses. This process may be used to quantify the impacts of this investment of public funds.



STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Bright Lights, Safe Nights Street Lighting Program
DEPARTMENT:	Engineering
CONTACT PERSON:	David T. Wilkinson
PHONE:	(757) 926-8690
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$1,100,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The majority of the City's streetlights are owned by Dominion Virginia Power and are on a "re-lamping" schedule to replace the light bulbs. However, the re-lamping is a one for one replacement and does not take into consideration the illumination levels that are being produced. The City assumes responsibility for costs associated with any upgrade lighting or installation of new systems.

The City of Newport News Bright Lights, Safe Nights Street Lighting Program supports the City's efforts around livable communities and urban development. The City's street lighting program is designed to provide well-lighted streets throughout the City, thereby increasing pedestrian and vehicular safety, suppressing crime and increasing street capacities.

The City of Newport News has historically invested in street lighting for decades which has resulted in wide variations of street lighting types and illumination levels. The Bright Lights, Safe Nights Street Lighting Program creates a cohesive lighting system throughout the city, ensure that all areas of Newport News have adequate light levels for land use and safety purposes, and assists in ensuring quality, efficiency, cost effectiveness, ease of operation and maintenance. As part of this program, the City plans and constructs new lighting projects in areas currently not served by street lights as well as reviews existing locations for street light upgrades to bring the lighting levels into compliance with current City standards.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$140,000	$140,000	$140,000	$140,000	$140,000	**$700,000**
Grant Funding	$400,000					**$400,000**
Funding Source Total:	**$540,000**	**$140,000**	**$140,000**	**$140,000**	**$140,000**	**$1,100,000**
PROJECT COST:						
Construction	$424,000	$93,627	$50,000	$71,225	$66,070	**$704,922**
Contingency	$23,150	$8,230	$10,000	$9,800	$9,570	**$60,750**
Internal Staff Cost	$14,500	$5,000	$6,000	$6,000	$6,000	**$37,500**
Other	$14,650	$10,500	$18,740	$26,000	$32,000	**$101,890**
Planning/Design	$63,700	$22,643	$55,260	$26,975	$26,360	**$194,938**
Project Total:	**$540,000**	**$140,000**	**$140,000**	**$140,000**	**$140,000**	**$1,100,000**

IMPACT ON OPERATING BUDGET: Higher efficiency streetlights will reduce related utility expenses.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Goal: Maximizing the quality, sustainability, and visibility of the street lighting system.

Objective: Creating a consistent and cohesive lighting system based in place-type characteristics throughout the City of Newport News.

Measure: A number of residential units and properties that are impacted with a new street lighting project and/or upgrade street lighting project.

Citizen Impact: Street lighting that meets current standards, provides improved roadway safety and can help to aid navigation. Furthermore, it enhances public safety and crime reduction strategies by: assisting neighborhood watch programs; aiding night-time calls for service by police, fire and emergency services; and improving pedestrian, transit users, bicycle and motorist visibility and safety.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Campbell Road Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Daniel McBride
PHONE:	757-926-8715
PROJECT LOCATION:	Campbell Road from Bland Blvd north to Warwick Blvd.

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

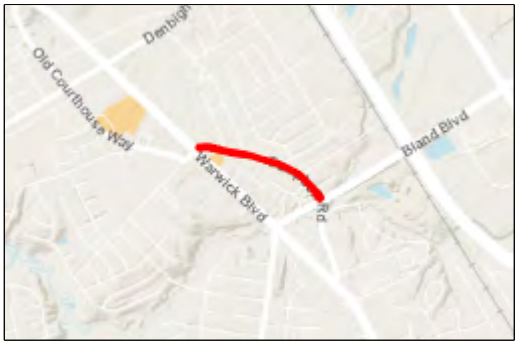
PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$7,500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will reconstruct the north section of Campbell Road from Bland Boulevard to Warwick Boulevard at Tabbs Lane and construct the storm sewer system, curb and gutter along road. The existing Campbell Road is the old Route 60 right-of-way and is configured as a county road. Deep ditches and limited pavement width lined with residential properties provides for potentially hazardous interactions between through and turning vehicles and pedestrians under the existing conditions. The improvements will provide a safer roadway for vehicular and pedestrian traffic and storm sewer for improved drainage.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget						**-**
Gen Obligation Bond (GOB)		$1,000,000	$2,750,000			**$3,750,000**
Grant Funding		$1,000,000	$2,750,000			**$3,750,000**
Funding Source Total:	**-**	**$2,000,000**	**$5,500,000**	**-**	**-**	**$7,500,000**
PROJECT COST:						
Construction		$900,000	$5,130,000			**$6,030,000**
Other		$200,000	$370,000			**$570,000**
Planning/Design						**-**
Site Acquisition		$900,000				**$900,000**
Project Total:	**-**	**$2,000,000**	**$5,500,000**	**-**	**-**	**$7,500,000**

IMPACT ON OPERATING BUDGET: The project will reduce the repair costs of maintaining a sub-standard roadway and roadside ditches.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Goal: Maintain or improve the level of service and safety.
Outcome measure: To improve the level of service for the 5,441 vehicles which travel the roadway daily.



STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Canon Boulevard Intersection Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Dan Blackburn
PHONE:	757-926 3977
PROJECT LOCATION:	Canon Boulevard between Mariners Row and Omni Parkway and at Town Center Drive

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

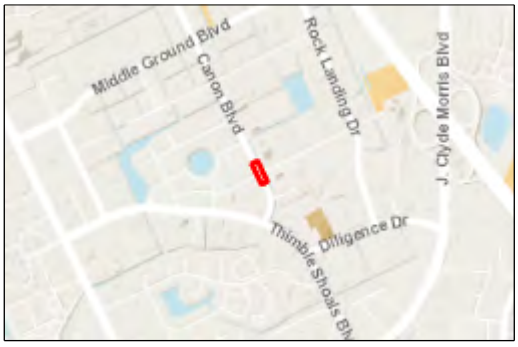
PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$100,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will add a left turn lane on Canon Boulevard for the intersection at Mariners Row. It also proposes the addition of a right turn lane onto the proposed Town Center Drive extension to the East. This project will deliver a safety and congestion improvement related to overall traffic in the Oyster Point area as identified by recent studies. The project is proposed as a prelude to the development of parcels to the east of Canon Boulevard and to the north of Omni Boulevard minimizing the impact to development and construction costs while encouraging the desired high level commercial development befitting the area. The project's funding budget is a place-holder.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget					$100,000	**$100,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**-**	**-**	**-**	**-**	**$100,000**	**$100,000**
PROJECT COST:						
Planning/Design					$100,000	**$100,000**
Project Total:	**-**	**-**	**-**	**-**	**$100,000**	**$100,000**

IMPACT ON OPERATING BUDGET: Future costs for maintenance and power for signal lights and street lights, landscaping costs for bush and tree trimming, mowing and potentially watering systems litter pickup and disposal will all add to the operational costs for the city. These costs should be more than compensated by the increase in the tax base provided by the development of this area.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: 1. To improve on the safety and appearance of the area to attract businesses as well as improve quality of life for citizens.
2. Measure project length with ADT.
3. To improve and install access throughout the City to create a more sustainable and safe pedestrian atmosphere.
4. Location and length of route will give cyclists and pedestrians a path to relocate away from the roadway mitigating interference with approximately 10,000 vehicles per day.



STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Chesapeake Avenue Bike Trail		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Daniel McBride	**PHONE:**	926-8715
PROJECT LOCATION:	Chesapeake Avenue		

DISTRICT:			**PRIORITIES:**		
	SOUTH	X		Economic Dev & Redev	X
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	X
	CITYWIDE			Fiscal Mgt & Efficient Ops	
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Streets and Bridges			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$1,000,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Pursuant to the "Hampton Roads Waterfront Parks Plan" prepared by the Planning Department and adopted by City Council in August 1994 and reinforced in the Southeast Community Urban Waterfront Design Study, as well as the Southeast Community Plan, this project will convert the existing bike route to a bike trail and construct a separate pedestrian promenade walkway along the seawall. A bike trail physically separates the area of bicycle travel and motor vehicle travel, creating a safer environment for the cyclist.

In addition to the bike trail and promenade, given the water views in this area and general residential feel of the street, the project proposes the removal of the existing rumble strip median and replacement with a landscaped median and creation of on-street parking along the northern (residential) side of Chesapeake Avenue.

The proposed project is consistent with the City's comprehensive plan, Framework for the Future 2030, Transportation Goal 1, "Plan and develop an efficient and balanced multi-modal transportation system to reduce congestion and support the City's future growth and development." Policy 1.4, "Build bikeways including on-street bicycle lanes and routes and off-street bicycle trails or paths."

The City previously applied for and was granted MAP-21 funds in FY15 for a portion of the desired work in the area. The future funding would be to complete the construction of the project.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$100,000	$100,000				**$200,000**
Gen Obligation Bond (GOB)						**-**
Grant Funding	$400,000	$400,000				**$800,000**
Funding Source Total:	**$500,000**	**$500,000**	**-**	**-**	**-**	**$1,000,000**
PROJECT COST:						
Construction	$430,120	$430,120				**$860,240**
Other	$69,880	$69,880				**$139,760**
Project Total:	**$500,000**	**$500,000**	**-**	**-**	**-**	**$1,000,000**

IMPACT ON OPERATING BUDGET: The project will increase costs for maintenance of improvements such as additional pavement surfaces, railings (if required), landscaping and irrigation, and signage and pavement markings.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: To improve on the safety and appearance of the area to attract recreational as well as commuter pedestrians and cyclists in order to improve the quality of life for citizens.
- Measure the number of cyclists and pedestrians using the new facilities where none existed.
- To improve on the safety and appearance of the area to attract recreational as well as commuter pedestrians and cyclists in order to improve the quality of life for citizens.
- To improve and install access throughout the City to create a more sustainable and safe pedestrian atmosphere.
- Measure the bike trail and sidewalk of 0.64 miles to improve the safety of the cyclists and pedestrians by removing them from interfering with the 1,694 vehicles per day traveling along Chesapeake Ave.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Citywide Concrete Replacement Project
DEPARTMENT:	Public Works
CONTACT PERSON:	Kenny Holloway
PHONE:	7572692801
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$2,500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The funds requested will allow the Division to contract a majority, if not all, of the concrete work required on reconstruction projects completed by the Division. This will allow the two concrete crews to concentrate their efforts on the backlog listings. The curb and gutter backlog now consists of 342 complaints and the sidewalk backlog consist of 43 complaints which were mostly received from citizens. The Division received numerous complaints concerning sidewalks on Jefferson Avenue from 74th Street to 40th Street. This past year's funding allowed the Division to coordinate sidewalk replacements and ADA ramp standardization (mandated by Federal ADA laws) in conjunction with the Engineering Department's Handrail Replacement Project in the same area. This portion of Jefferson Avenue will be ready for paving in 2016.

If not funded, the concrete work on reconstruction/paving projects will have to continue to be completed by Street Maintenance personnel. This will create a larger backlog of sidewalk, curb and gutter work orders (complaints). The Division will not be able to assist other departments or divisions to complete special concrete projects.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
Funding Source Total:	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$2,500,000**
PROJECT COST:						
Construction	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
Project Total:	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$500,000**	**$2,500,000**

IMPACT ON OPERATING BUDGET: No direct impact will be on the operating budget. This request would provide increased funding to improve the response to maintenance requests for concrete replacement/repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: This project will result in a direct reduction of outstanding maintenance requests for concrete repairs throughout the City. Currently, there are requests that date back several years that have not been addressed. The funding would allow the Division to concentrate the in-house concrete crews on the citizens' request backlog which will not only show the City's commitment to addressing their safety concerns, but also show improved maintenance of City infrastructure, therefore leading to a more positive view from the citizens.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Citywide Pedestrian Improvements at Traffic Signals
DEPARTMENT:	Engineering
CONTACT PERSON:	Jackie Kassel
PHONE:	926-8666
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	**X**

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$1,000,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: Pedestrian improvements at signalized intersections will include pedestrian countdown signal displays with push buttons, crosswalks, handicap ramps and signage.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Grant Funding		$250,000	$250,000	$500,000		**$1,000,000**
Funding Source Total:	**-**	**$250,000**	**$250,000**	**$500,000**	**-**	**$1,000,000**
PROJECT COST:						
Construction		$200,000				**$200,000**
Planning/Design		$50,000	$250,000	$500,000		**$800,000**
Project Total:	**-**	**$250,000**	**$250,000**	**$500,000**	**-**	**$1,000,000**

IMPACT ON OPERATING BUDGET: The project is 100% grant funded from regional Congestion Mitigation and Air Quality funds.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The improvements will provide a safer crossing environment for pedestrians at signalized intersections.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Independence Boulevard
DEPARTMENT:	Engineering
CONTACT PERSON:	Daniel McBride
PHONE:	926-8611
PROJECT LOCATION:	Between Denbigh Boulevard and Ft. Eustis Boulevard in the proposed Huntington Pointe subdivision.

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

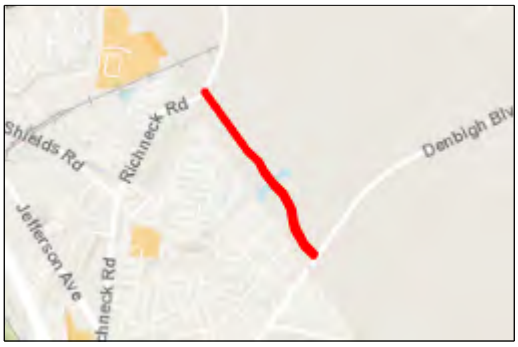
PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$15,250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will adjoin north-south roadway connecting Denbigh Boulevard and Fort Eustis Boulevard. The funding proposed is developer contributions and State Revenue Sharing Grant funds. The project includes a regional stormwater basin to handle water quality and quantity funded in part by developer contributions and in part by the Stormwater Fund.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Grant Funding	$125,000		$2,500,000	$2,500,000	$2,500,000	**$7,625,000**
Other	$125,000		$2,500,000	$2,500,000	$2,500,000	**$7,625,000**
Funding Source Total:	**$250,000**	**-**	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$15,250,000**
PROJECT COST:						
Construction			$5,000,000	$5,000,000	$5,000,000	**$15,000,000**
Planning/Design	$250,000					**$250,000**
Project Total:	**$250,000**	**-**	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$15,250,000**

IMPACT ON OPERATING BUDGET: This facility will be maintained by the City and will qualify for state maintenance reimbursement funds.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Independence Boulevard will allow the development of the adjoining parcels as well as provide a secondary north-south connector for traffic without direct financial contribution by the City.



STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Intelligent Transportation System Upgrades		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Jackie Kassel	**PHONE:**	926-8666
PROJECT LOCATION:	Citywide		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Streets and Bridges			Mandated/Legal Requirement	
TOTAL ESTIMATED COST:	$300,000		**NEW PROJECT:**	Y	

PROJECT DESCRIPTION and/or JUSTIFICATION: The Intelligent Transportation System (ITS) upgrades include design and installation of items such as CCTV for traffic monitoring, traffic count stations, traffic adaptive equipment and improved communications network.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Grant Funding	$60,000	$240,000				**$300,000**
Funding Source Total:	**$60,000**	**$240,000**	**-**	**-**	**-**	**$300,000**
PROJECT COST:						
Construction		$240,000				**$240,000**
Planning/Design	$60,000					**$60,000**
Project Total:	**$60,000**	**$240,000**	**-**	**-**	**-**	**$300,000**

IMPACT ON OPERATING BUDGET: The project is 100% grant funded from regional Congestion Mitigation and Air Quality funds.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The transportation network will be improved.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Lower Jefferson Avenue Streetscape (Improvements from 12th Street to 24th Street)
DEPARTMENT:	Engineering
CONTACT PERSON:	Daniel McBride
PHONE:	757-926-8715
PROJECT LOCATION:	Jefferson Avenue 12th Street to 24th Street

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	X
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$8,500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: This project is the second part of the phased improvements plan to the Southeast Community grid network of streets including utility work, street reconstruction and beautification. The City received FY 2013 and FY 2015 State Revenue Sharing matching funds for the design and right-of-way phases of this project. Subject to City Council's approval, Engineering and Development plan to request additional revenue sharing funds in FY 2017 and FY 2018 to fund the construction phase of this project.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$2,250,000	$2,000,000				**$4,250,000**
Grant Funding	$2,250,000	$2,000,000				**$4,250,000**
Funding Source Total:	**$4,500,000**	**$4,000,000**	**-**	**-**	**-**	**$8,500,000**
PROJECT COST:						
Construction	$4,150,000	$3,600,000				**$7,750,000**
Other	$350,000	$400,000				**$750,000**
Planning/Design						**-**
Site Acquisition						**-**
Project Total:	**$4,500,000**	**$4,000,000**	**-**	**-**	**-**	**$8,500,000**

IMPACT ON OPERATING BUDGET: The project will reduce the repair costs on maintaining an older roadway system. There will be an increased cost associated with maintenance of the additional landscaping within the project limits.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Goal: To improve on the safety and appearance of the area to attract businesses as well as improve the quality of life for citizens. This project will support the current redevelopment efforts in the area.

Outcome measures: 0.7 miles of improvements that will improve the area for the current 15,543 vehicles per day that use the road.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Neighborhood Enhancement Program
DEPARTMENT:	Engineering
CONTACT PERSON:	David T. Wilkinson
PHONE:	(757) 926-8690
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$1,592,110
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: As a large portion of the City was once the County of Warwick, the City inherited many old county roads that were not built to a City roadway standard. The Neighborhood Enhancement Program is intended to address neighborhood traffic safety, preserve neighborhood character and livability, and engage residents through neighborhood involvement. The program will identify improvements that meet these goals through a collective understanding among the residents and City staff of neighborhood traffic issues and concerns, as well as potential solutions.

This program is intended to fund a wide variety of neighborhood projects identified though citizen and staff collaboration. The program provides funds for physical neighborhood improvements such as sidewalks, roadway reconstruction, playgrounds, trees, handicap accessibility, neighborhood signage programs, traffic calming, enhancement of greenways and bikeways to name a few.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$306,522	$313,022	$319,522	$326,522	$326,522	**$1,592,110**
Funding Source Total:	**$306,522**	**$313,022**	**$319,522**	**$326,522**	**$326,522**	**$1,592,110**
PROJECT COST:						
Construction	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
Contingency	$12,400	$12,400	$12,400	$12,400	$12,400	**$62,000**
Internal Staff Cost	$7,500	$7,500	$7,500	$7,500	$7,500	**$37,500**
Other	$6,622	$13,122	$19,622	$26,622	$26,622	**$92,610**
Planning/Design	$30,000	$30,000	$30,000	$30,000	$30,000	**$150,000**
Site Acquisition	$50,000	$50,000	$50,000	$50,000	$50,000	**$250,000**
Project Total:	**$306,522**	**$313,022**	**$319,522**	**$326,522**	**$326,522**	**$1,592,110**

IMPACT ON OPERATING BUDGET: This project will reduce repair costs on maintaining sub-standard roadways.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Goal: To the greatest extent possible, improvements will be made to the existing local roadway network to preserve or improve upon its current condition.

Objective: Provide smaller projects on local streets that increase the safety and livability of the residents.

Measure: Number of residential properties enhanced with a better local street system.

Citizen Impact: Improving the City's local roadways provides the most direct quality of life improvement for citizens as most of the local roads are within residential communities. Providing sidewalks and widened streets makes for a safer environment for residents to be out and about in their neighborhoods.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	One Accessible City – Pedestrian, Bicycle & Road Safety Enhancement Program
DEPARTMENT:	Engineering
CONTACT PERSON:	David T. Wilkinson
PHONE:	(757) 926-8690
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$4,590,307
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The One Accessible City – Pedestrian, Bicycle & Road Safety Enhancement Program is the evolution of the previous Pedestrian and Road Safety Improvements project. The goal of the program is to define and fund capital improvement projects that enhance pedestrian, bicycle and roadway safety as well as reduce traffic fatalities and serious injuries on all city roadways through infrastructure improvements, education, and enforcement. The program requires a data-driven, strategic approach to improving safety on all public roads and all modes of travel that focuses on performance.

A safety improvement project is any strategy, activity or project on a public road that corrects or improves a hazardous road location, feature or addresses a safety problem. The program incorporates other City initiates. For example, the City Council adopted the Intersection Improvement Program for targeted intersection improvements citywide aimed to reduce congestion and eliminate hazards. As well as the City's Roadside Hazards Reduction Program that is aimed at correcting identified safety hazards within and adjacent to the City's transportation network including the installation/replacement of guardrail systems and the elimination of hazards to reduce on and off road fixed object collisions.

The program is an overall program that identifies locations and through the operating budget proceeds with low cost high benefits solutions such as signage, markings, education and enforcement. It then further identifies higher cost solutions with an acceptable benefit to cost ratio with project costs that need to be funded through the CIP, not the operating budget. The locations are identified through citizen concerns, engineering studies and the City's crash analysis staff. Improvements can include or be a combination of intersection improvements, traffic signal and operational improvements, turn lane improvements, channelization improvements, roadway widening, sidewalks/multi-use paths, street lighting, roadway realignments, etc. and associated improvements such as ADA compliance requirements.

This program also funds the grant match of $100,000 for the Transportation Alternatives Program (TAP). The TAP helps localities fund community based projects (valued at $500,000) that expand travel choices with a focus on pedestrian and bicycle facilities. TAP is part of the Federal-Aid Highway program and requires a 20% match. The City is seeking funding for the construction of pedestrian improvements including signals and crosswalks at intersections and improved bicycle accommodations outside of the roadway.

Projects financed through this program are consistent with the City's comprehensive plan, Framework for the Future 2030, Transportation Goal 1, "Plan and develop an efficient and balanced multi-modal transportation system to reduce congestion and support the City's future growth and development."

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$609,443	$543,478	$670,443	$566,943	$600,000	**$2,990,307**
Grant Funding		$400,000	$400,000	$400,000	$400,000	**$1,600,000**
Funding Source Total:	**$609,443**	**$943,478**	**$1,070,443**	**$966,943**	**$1,000,000**	**$4,590,307**
PROJECT COST:						
Construction	$356,943	$664,713	$764,648	$633,268	$637,595	**$3,057,167**
Contingency	$47,000	$47,000	$47,000	$47,000	$47,000	**$235,000**
Internal Staff Cost	$30,000	$30,000	$30,000	$30,000	$30,000	**$150,000**
Other	$25,500	$51,765	$78,795	$106,675	$135,405	**$398,140**
Planning/Design	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
Site Acquisition	$50,000	$50,000	$50,000	$50,000	$50,000	**$250,000**
Project Total:	**$609,443**	**$943,478**	**$1,070,443**	**$966,943**	**$1,000,000**	**$4,590,307**

IMPACT ON OPERATING BUDGET: None Identified

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Goal: Develop, implement, and manage an integrated multi-stakeholder process to improve the attributes of roads, users, and vehicles to reduce traffic-related deaths and serious injuries.

Objective: Roadway users arrive safely at their destinations.

Measure: Total Fatalities and serious injury crashes per 100M VMT.

Citizen Impact: Deaths and injuries resulting from traffic crashes are serious public health concerns and are not conducive to the high quality of life expected in the City of Newport News. Approximately 7 traffic crashes occurred each day last year with 1,177 injuries and 9 fatalities. Crashes were on a downward trend since 2004 but have started to rise since 2011. Not only the loss of life but the substantial impact within local communities relative to medical costs, lost wages, insurance costs, taxes, police, fire and emergency medical services, legal and court costs, as well as property damage is significant. All efforts to reduce traffic crashes have a significant impact on all the citizens in Newport News. Policy 1.4, "Build bikeways including on-street bicycle lanes and routes, and off-street bicycle trails or paths."

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Route 105 Bridge Replacement Over the Newport News Reservoir
DEPARTMENT:	Engineering
CONTACT PERSON:	Carolyn Bowman
PHONE:	757-926-3667
PROJECT LOCATION:	Fort Eustis Boulevard Bridge Over Reservoir

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$19,600,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The bridge is nearing the end of its useful lifespan and has deteriorated to the point that replacement is deemed necessary. The superstructure is in poor condition and the bridge is currently classified as structurally deficient. It is the opinion of the City's consultant bridge engineer that, after one more inspection cycle, the bridge is likely to require a weight restriction posting. The City received State Revenue Sharing matching funds in FY 2015 for the design phase of this project and has recently applied for Federal Lands Access Program Funds which would only cover a portion of the construction costs if approved. The bridge is both on the National Highway System and in the Strategic Highway Network. It has an average daily traffic count of more than 38,500 vehicles per day. The bridge also supports a Federal military installation (Ft. Eustis) and will be a major detour route for the I-64 widening project.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)						**-**
Grant Funding	$19,600,000					**$19,600,000**
Funding Source Total:	**$19,600,000**	**-**	**-**	**-**	**-**	**$19,600,000**
PROJECT COST:						
Construction	$19,600,000					**$19,600,000**
Planning/Design						**-**
Project Total:	**$19,600,000**	**-**	**-**	**-**	**-**	**$19,600,000**

IMPACT ON OPERATING BUDGET: Replacing the bridge will reduced annual maintenance expenses, prevent weight restrictions with economic costs and provide a bridge updated to current functional and safety standards.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Completion of the bridge replacement will correct the noted structural deficiencies. Completion of this project will improve safety for the 38,500+ motorists who traverse this portion of the roadway on a daily basis.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Traffic Signal Installation and Upgrade Program		
DEPARTMENT:	Engineering		
CONTACT PERSON:	David T. Wilkinson	**PHONE:**	(757) 926-8690
PROJECT LOCATION:	Various		

DISTRICT:	SOUTH		**PRIORITIES:**	Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	
	CITYWIDE	**X**		Fiscal Mgt & Efficient Ops	**X**
				Max Emphasis Public Safety	**X**
PROJECT CATEGORY:	Streets and Bridges			Mandated/Legal Requirement	
TOTAL ESTIMATED COST:	$2,929,500		**NEW PROJECT:**	N	

PROJECT DESCRIPTION and/or JUSTIFICATION: The City recognizes the operational and aesthetic benefits of using mast arm traffic signals in place of traditional diagonal or box span wire traffic signals. The progressive conversion of older span wire signals to mast arm signals will improve safety by placing traffic signals in-line with road lanes to reduce the rate for red light running and provide a cleaner look throughout the City by reducing the number of overhead wires along City roads. These results should benefit property values and increase business owner confidence throughout the City.

As Newport News is impacted by several tropical storms and hurricanes, the rapid restoration of the City's traffic signal system to a safe operating level after a hurricane is of critical importance. The more mast-arms that are installed throughout the City, the higher the survival rate will be for the signal system, and the less time it will take to restore the system to basic operation. The quicker the system is restored, the less likely there will be vehicle crashes and injuries related to signal outages. Mast arm signals generally have lower maintenance costs than span wires reducing operating budget expenses.

In addition to mast arm conversion projects, this program also funds new mast arm traffic signals at existing un-signalized intersections that meet the federal warrants and are supported by a City Engineering study. It provides funding for other existing traffic signal upgrades including emergency vehicle pre-emption (EVP) detectors, thermal vehicle detection, structural inspections and maintenance. Traffic signals are a vital tool used to safely and efficiently manage vehicle, bicycle and pedestrian traffic on city streets.

EVP systems are designed to give emergency response vehicles a green light on their approach to a signalized intersection while providing a red light to conflicting approaches. The most commonly benefits of using EVP include improved response time, improved safety, reduced liability and cost savings in fire/medical planning. Advanced traffic signal systems require a method of detecting a vehicle is at the stop bar or is approaching the intersection to be able to allow the control computer to make decisions ranging from simply changing who gets the green light to more advance safety features like extending the length of a yellow to allow a vehicle in the critical decision area some extra time to clear the intersection. Thermal detection offers the most reliable system for vehicle detection. They distinguish between vehicles and bicycles, can operate in the darkest of conditions and can operate in the difficult weather conditions including sun glare.

This program provides the City's annual match for Revenue Sharing Funds for Traffic Signal Mast Arm Conversion Projects of $150,000.

The amount of safety improvements will be limited to the amount of funding available within the program per year. With escalation factors included in the budgetary line item, the annual cost of the program must be increased to maintain the same level of improvements as the current year.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$329,000	$344,500	$360,000	$377,000	$394,000	**$1,804,500**
Grant Funding	$225,000	$225,000	$225,000	$225,000	$225,000	**$1,125,000**
Funding Source Total:	**$554,000**	**$569,500**	**$585,000**	**$602,000**	**$619,000**	**$2,929,500**
PROJECT COST:						
Construction	$450,000	$450,000	$450,000	$450,000	$450,000	**$2,250,000**
Contingency	$24,000	$24,000	$24,000	$24,000	$24,000	**$120,000**
Internal Staff Cost	$15,000	$15,000	$15,000	$15,000	$15,000	**$75,000**
Other	$15,000	$30,500	$46,000	$63,000	$80,000	**$234,500**
Planning/Design	$45,000	$45,000	$45,000	$45,000	$45,000	**$225,000**
Site Acquisition	$5,000	$5,000	$5,000	$5,000	$5,000	**$25,000**
Project Total:	**$554,000**	**$569,500**	**$585,000**	**$602,000**	**$619,000**	**$2,929,500**

IMPACT ON OPERATING BUDGET: None identified.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Goal: To enhance the safety and operation of the transportation signal network.

Objective: Ensure the integrity of the transportation signal network and increase the safety through conversions, new installations and enhancements to the network.

Measure: Number of mast arm traffic signals in the network, number of signals with EVP, and number of signals with thermal vehicle detection.

Citizen Impact: A complete modern traffic signal that includes a mast arm design, EVP and thermal vehicle detection has lower maintenance costs. This adds to the aesthetic appeal of the City which can increase property values, increase business owner confidence and reduce congestion through better detection resulting in less wait time. Primarily, it adds to the safety of the citizens through quicker emergency response times and better operations of the signalized intersection.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Traffic Signal Timing Improvements		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Jackie Kassel	**PHONE:**	926-8666
PROJECT LOCATION:	Citywide		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Streets and Bridges			Mandated/Legal Requirement	
TOTAL ESTIMATED COST:	$900,000		**NEW PROJECT:**	Y	

PROJECT DESCRIPTION and/or JUSTIFICATION: The Department of Engineering has been successful in obtaining Congestion Mitigation and Air Quality (CMAQ) grant funding for the Citywide Traffic Signal Timing Program. Traffic signal timings will be developed as part of a detailed analysis of high capacity corridors and implemented to reduce delay and congestion.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Grant Funding	$300,000	$300,000	$300,000			**$900,000**
Funding Source Total:	**$300,000**	**$300,000**	**$300,000**	**-**	**-**	**$900,000**
PROJECT COST:						
Planning/Design	$300,000	$300,000	$300,000			**$900,000**
Project Total:	**$300,000**	**$300,000**	**$300,000**	**-**	**-**	**$900,000**

IMPACT ON OPERATING BUDGET: The project is 100% grant funded from regional Congestion Mitigation and Air Quality funds.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will improve travel times citywide.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Transportation Major Project Match
DEPARTMENT:	Engineering
CONTACT PERSON:	Bryan Stilley
PHONE:	(757) 926-8699
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$23,250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Historically, funding for major transportation projects within the City was provided from VDOT through the Urban Highway System. This included Federal, State and local funds. Funding from the Urban Highway System is no longer available. VDOT now offers an expanded Revenue Sharing Program that requires a minimum 50% City match. Revenue Sharing funds are competed at the State level. The Regional Surface Transportation Program (RSTP) funds, a federally funded program that does not require a City match, provides another funding source for transportation projects. RSTP funds are competed for at the Transportation Planning Organization.

The City applies for State Revenue Sharing Program funds annually in October with an award from the State in June. The City's FY 2017 tentative application, subject to City Council's approval in October, includes the following projects:

1. Atkinson Boulevard: Warwick Boulevard to Jefferson Avenue*
2. Warwick Blvd & Bland Blvd**
3. Lower Jefferson Avenue Streetscape*
4. Traffic Signal Mast Arm Conversion*
5. New City Sidewalks and ADA Ramps
6. City Sidewalk and ADA Ramp Maintenance
7. Habersham Drive Extension
8. Hogan Drive Extension ***
9. Independence Blvd*

* The project is listed separately on an individual project sheet. The City's match for this project is not included in the Transportation Major Project Match but it is included on the individual project sheet. Projects that have previously received revenue sharing funds or have been approved in a previous CIP have been listed separately. New projects being requested and future years anticipated City matches are included in Transportation Major Project Match until approval from the State has been determined, at which time, an individual project sheet will be added.

** The project is listed separately in the Stormwater Drainage Category.

*** The project is listed separately in the Community Development Category

Currently the Revenue Sharing funds are capped at $20 million dollars per year. The six projects above that are listed separately are already included in their CIP budget which is the City's match for a portion of the City's $20 million dollars per year allotment. This item is for matching funds and is not necessarily the total project funds for the other three projects and future identified projects. No escalation factors are presented. Escalation factors will be included in the projects as they become identified separately in the CIP.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$2,825,000	$1,125,000	$125,000	$2,375,000	$4,875,000	**$11,325,000**
Grant Funding	$3,125,000	$1,125,000	$125,000	$2,375,000	$4,875,000	**$11,625,000**
Other	$300,000					**$300,000**
Funding Source Total:	**$6,250,000**	**$2,250,000**	**$250,000**	**$4,750,000**	**$9,750,000**	**$23,250,000**
PROJECT COST:						
Construction	$6,250,000	$2,250,000	$250,000	$4,750,000	$9,750,000	**$23,250,000**
Contingency						**-**
Internal Staff Cost						**-**
Planning/Design						**-**
Project Total:	**$6,250,000**	**$2,250,000**	**$250,000**	**$4,750,000**	**$9,750,000**	**$23,250,000**

IMPACT ON OPERATING BUDGET: The new and expanded highways will require minimal maintenance initially. Over time, maintenance costs must be addressed in future operating budgets.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Goal: To develop a transportation plan for the City that is financially constrained and meets our needs.

Objective: To identify alternate means for funding transportation initiatives.

Measure: Supplement the Capital Improvement Budget with State and Federal Grant funding.

Citizen Impact: Identifying other funding sources free up capital funds for other projects for overall citizen benefits. Reducing the transportation network's carbon foot print reduces the operating costs saving tax payer money while reducing their delay due to congestion.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	VDOT Project Support
DEPARTMENT:	Engineering
CONTACT PERSON:	Dan Blackburn/ Susan Goodwin
PHONE:	926-3977 / 926-8670
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	**X**

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$125,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The funding is to support various VDOT projects that require a minimal local match. In addition, the City is responsible for all costs in excess of grant funds approved for projects. These annual funds will ensure completion of the grant funded projects that the City administers through VDOT each year.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$25,000	$25,000	$25,000	$25,000	$25,000	**$125,000**
Grant Funding						**-**
Funding Source Total:	**$25,000**	**$25,000**	**$25,000**	**$25,000**	**$25,000**	**$125,000**
PROJECT COST:						
Construction	$25,000	$25,000	$25,000	$25,000	$25,000	**$125,000**
Project Total:	**$25,000**	**$25,000**	**$25,000**	**$25,000**	**$25,000**	**$125,000**

IMPACT ON OPERATING BUDGET: The City will incur the cost of the maintenance for transportation infrastructure provided by Federal Aid grant money and State Urban allocations.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: This pool of funding is utilized to "leverage" State and Federal funding brought into the City for transportation related infrastructure improvements.

STREETS AND BRIDGES CAPITAL PROJECT

PROJECT NAME:	Warwick Boulevard Bridge over Lake Maury
DEPARTMENT:	Engineering
CONTACT PERSON:	Everett Skipper
PHONE:	
PROJECT LOCATION:	Warwick Boulevard at Lake Maury

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Streets and Bridges
TOTAL ESTIMATED COST:	$1,250,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: This bridge is considered structurally deficient, has reached the end of its service life and replacement is deemed necessary. The existing bridge will be replaced with a new six-lane bridge with a 6-foot sidewalk on the east side and a 14-foot multipurpose trail on the west side. Roadway improvements include widening Warwick Boulevard by adding one through lane from the J. Clyde Morris intersection through the intersection with the Riverside Regional Medical Center entrance. The additional through lane at the Riverside Regional Medical Center allows for a dedicated left turn lane along with three southbound lanes of through traffic which corresponds to the three lanes along the bridge crossing.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$625,000					**$625,000**
Grant Funding	$625,000					**$625,000**
Funding Source Total:	**$1,250,000**	**-**	**-**	**-**	**-**	**$1,250,000**
PROJECT COST:						
Construction	$1,250,000					**$1,250,000**
Project Total:	**$1,250,000**	**-**	**-**	**-**	**-**	**$1,250,000**

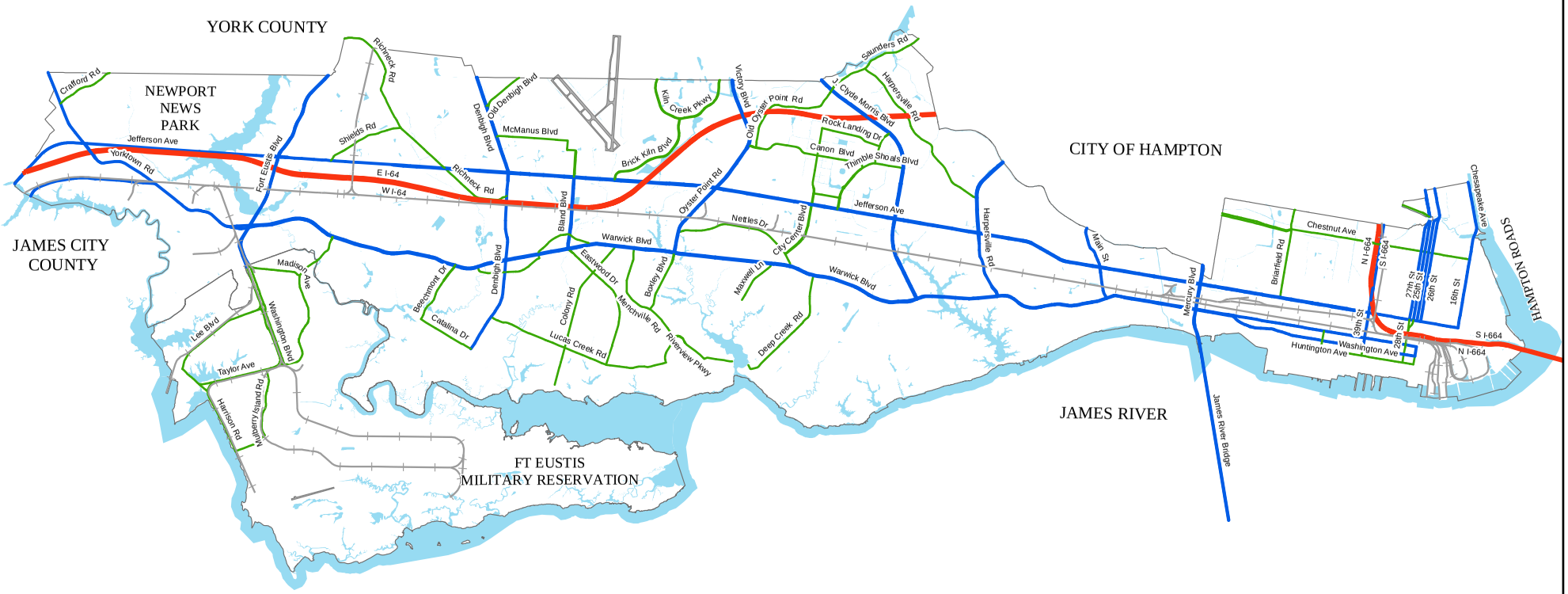
IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The bridge superstructure has been rated structurally deficient during the most recent NBIS bridge inspection. Preventative maintenance will help alleviate future structural problems. This effort will help minimize the financial cost, and avoid possible safety concerns and extended problems with traffic control for the citizens. Completion of this project will improve safety for the 25,102 motorists who traverse this portion of the roadway on a daily basis. Improvement of the structural condition of the bridge.

SELF-SUPPORTING FUNDS

SEWER REHABILITATIONS

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Sewer Rehabilitations



Citywide

Sanitary Sewer Maintenance, Operation and Management (MOM) Program
Sanitary Sewer Rehabilitation Program

SEWER REHABILITATIONS

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
GEN OBLIGATION BOND (GOB)						
Sanitary Sewer Maintenance, Operation and Management (MOM) Program	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	**$7,500,000**
Sanitary Sewer Rehabilitation Program	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	**$17,500,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$25,000,000**
SEWER REHABILITATIONS TOTAL:	***$5,000,000***	***$5,000,000***	***$5,000,000***	***$5,000,000***	***$5,000,000***	***$25,000,000***

SEWER REHABILITATIONS

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
GEN OBLIGATION BOND (GOB)						
Sanitary Sewer Maintenance, Operation and Management (MOM) Program	$1,622,250	$2,864,430	$491,727	$844,132	$846,270	**$6,668,809**
Sanitary Sewer Rehabilitation Program	$3,527,750	$2,440,070	$4,971,908	$4,783,412	$4,950,100	**$20,673,240**
TOTAL GEN OBLIGATION BOND (GOB):	**$5,150,000**	**$5,304,500**	**$5,463,635**	**$5,627,544**	**$5,796,370**	**$27,342,049**
SEWER REHABILITATIONS TOTAL:	***$5,150,000***	***$5,304,500***	***$5,463,635***	***$5,627,544***	***$5,796,370***	***$27,342,049***

SEWER REHABILITATIONS CAPITAL PROJECT

PROJECT NAME:	Sanitary Sewer Maintenance, Operation and Management (MOM) Program
DEPARTMENT:	Engineering
CONTACT PERSON:	Stephen Williams
PHONE:	757-926-8113
PROJECT LOCATION:	City Wide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Sewer Rehabilitations
TOTAL ESTIMATED COST:	$6,668,809
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The City's Maintenance Operations and Management (MOM) program is an ongoing response to the current regulatory environment requiring continuing inspection, analysis and assessment of the City's sanitary sewer infrastructure. As a result of these activities, numerous system structural and operational deficiencies are noted and can be programmed for future corrective action. However, past experience has shown that a number of the deficiencies identified may require immediate corrective action to prevent a failure that may result in a sanitary sewer overflow possibly impacting public health. This program would also initiate intermediate inflow/infiltration measures that may be identified as part of the MOM effort. These projects will be designed by the City's staff and the construction work will be performed by an annual services provider. Funding for consultant support is also included.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$1,622,250	$2,864,430	$491,727	$844,132	$846,270	**$6,668,809**
Funding Source Total:	**$1,622,250**	**$2,864,430**	**$491,727**	**$844,132**	**$846,270**	**$6,668,809**
PROJECT COST:						
Construction	$1,575,000	$2,700,000	$450,000	$750,000	$730,000	**$6,205,000**
Other	$47,250	$164,430	$41,727	$94,132	$116,270	**$463,809**
Project Total:	**$1,622,250**	**$2,864,430**	**$491,727**	**$844,132**	**$846,270**	**$6,668,809**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The sanitary sewer rehabilitation or repairs initiated by this program will immediately correct observed deficiencies found in the City's sewer system. These actions will preclude sanitary sewer overflows resulting from observed pipe failures and will ensure that sanitary sewer service will not be disrupted and public health will not be impacted.

SEWER REHABILITATIONS CAPITAL PROJECT

PROJECT NAME:	Sanitary Sewer Rehabilitation Program		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Stephen L. Williams, P.E.	**PHONE:**	2692493
PROJECT LOCATION:			

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	X
	NORTH			Community Renewal & Maint	X
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	
PROJECT CATEGORY:	Sewer Rehabilitations			Mandated/Legal Requirement	X
TOTAL ESTIMATED COST:	$20,673,240		**NEW PROJECT:**	N	

PROJECT DESCRIPTION and/or JUSTIFICATION: This program proposes addressing various sanitary sewer rehabilitation projects that have either been identified by the City's response to the Sanitary Sewer Overflow Consent Order or the planned work is too extensive for programming within the City's Sewer Maintenance, Operations and Management program. In addition, the program addresses major sewage pump station projects. All program projects have been identified as a critical need based on either poor pipe condition or pump station noncompliance with current standards.The scope of work for each programmed sewer pipe project will be established with project design but will likely include a mixture of pipe replacements and pipe rehabilitation using an approved pipe lining process. The extent of sewer rehabilitation accomplished with this program will be clarified upon further development of the Regional Wet Weather Management Plan.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$3,527,750	$2,440,070	$4,971,908	$4,783,412	$4,950,100	**$20,673,240**
Sewer User Fee						**-**
Funding Source Total:	**$3,527,750**	**$2,440,070**	**$4,971,908**	**$4,783,412**	**$4,950,100**	**$20,673,240**
PROJECT COST:						
Construction	$3,425,000	$2,300,000	$4,550,000	$4,250,000	$4,270,000	**$18,795,000**
Internal Staff Cost						**-**
Other	$102,750	$140,070	$421,908	$533,412	$680,100	**$1,878,240**
Planning/Design						**-**
Project Total:	**$3,527,750**	**$2,440,070**	**$4,971,908**	**$4,783,412**	**$4,950,100**	**$20,673,240**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The rehabilitation or replacement of existing sanitary sewers and the renovation or replacement of sewage pump stations will ensure reliable sanitary sewer service to those City residents served by the facilities. Pipe rehabilitation will eliminate groundwater infiltration caused by the deterioration of existing sewer pipe. Therefore, a net reduction in area infiltration rates can be anticipated, leading to a reduction of wet weather sanitary sewer overflows (SSO's). The mitigation of SSO's is required for the maintenance of public health. Rehabilitated sewer pipe will also provide the enhanced pipe structural integrity required to minimize future pipe failures and resultant disruptions of sewer service. The sewer pipe or pump stations rehabilitated by this program will ensure that reliable sewer service is maintained to those City residents served by the facilities.

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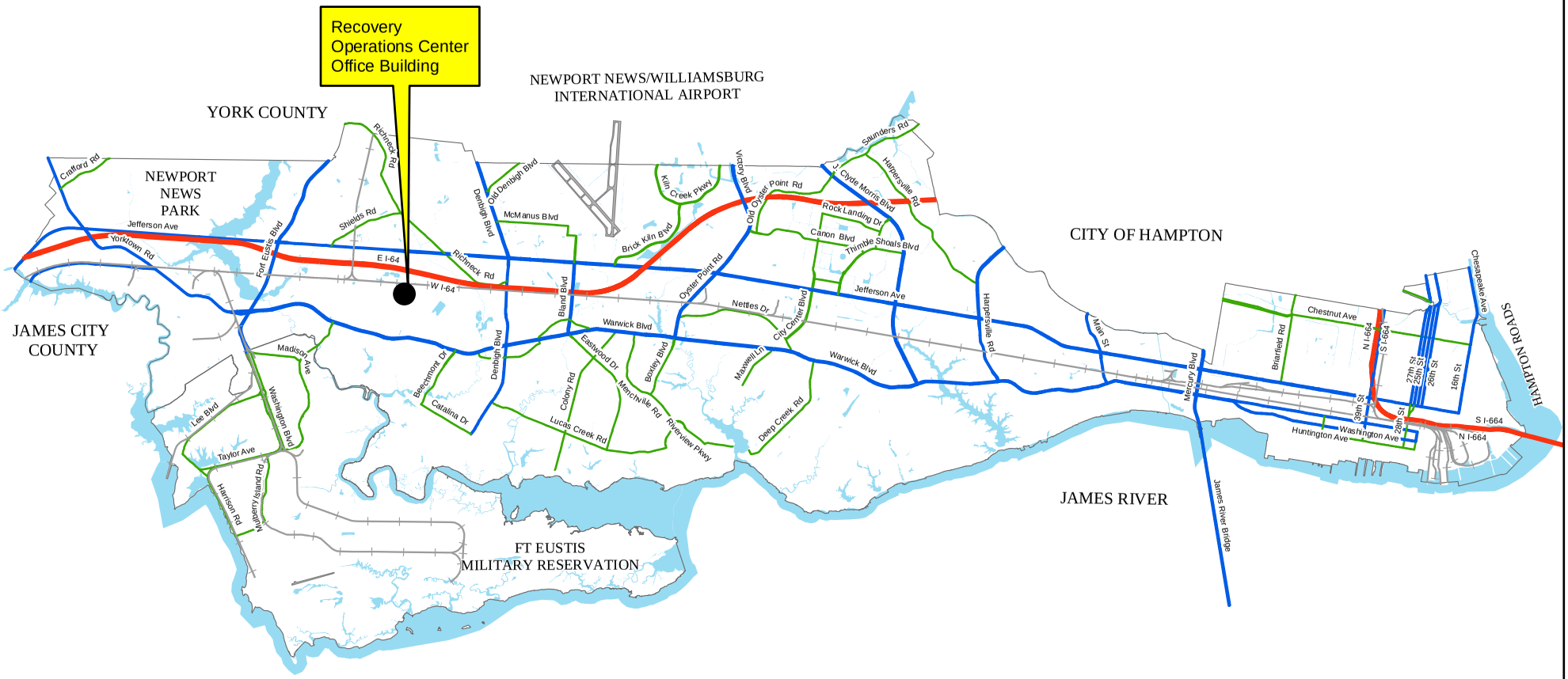
SOLID WASTE

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Solid Waste



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● Solid Waste

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SOLID WASTE

Recommended

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Recovery Operations Center Office Building	$450,000	$0	$0	$0	$0	**$450,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$450,000**	**$0**	**$0**	**$0**	**$0**	**$450,000**
SOLID WASTE TOTAL:	***$450,000***	***$0***	***$0***	***$0***	***$0***	***$450,000***

SOLID WASTE CAPITAL PROJECT

PROJECT NAME:	Recovery Operations Center Office Building
DEPARTMENT:	Public Works
CONTACT PERSON:	Roy Chesson
PHONE:	886-7610
PROJECT LOCATION:	Recovery Operations Center, 500 Atkinson Way

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Solid Waste
TOTAL ESTIMATED COST:	$450,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The offices for the Recovery Operations Center (ROC) are currently housed in two trailers. Trailers are less secure and history has proven they are more susceptible to break-ins. This puts not only expensive computer equipment at risk but also important records necessary to fulfill DEQ landfill permit requirements. Further, the existing trailers provide little protection to personnel in the event of intense thunderstorms or tornados and there are no showers available to use in the event that an employee's clothes or skin are exposed to a chemical spill (from HHW).

Funds will provide for construction of a new office building near the entrance of the ROC which will include up to 11 offices, a conference room, and restrooms with showers. The building will support the existing ROC staff and allow for future use by Parks personnel as the ROC is developed to provide more recreational functions in accordance with the City's master plan. Upon completion, the older dilapidated trailer could be removed. The newer trailer would continue to be used as the scale attendant window and as a new lunch/break room, hanging area and restrooms for employees working outside on the asphalt pad.

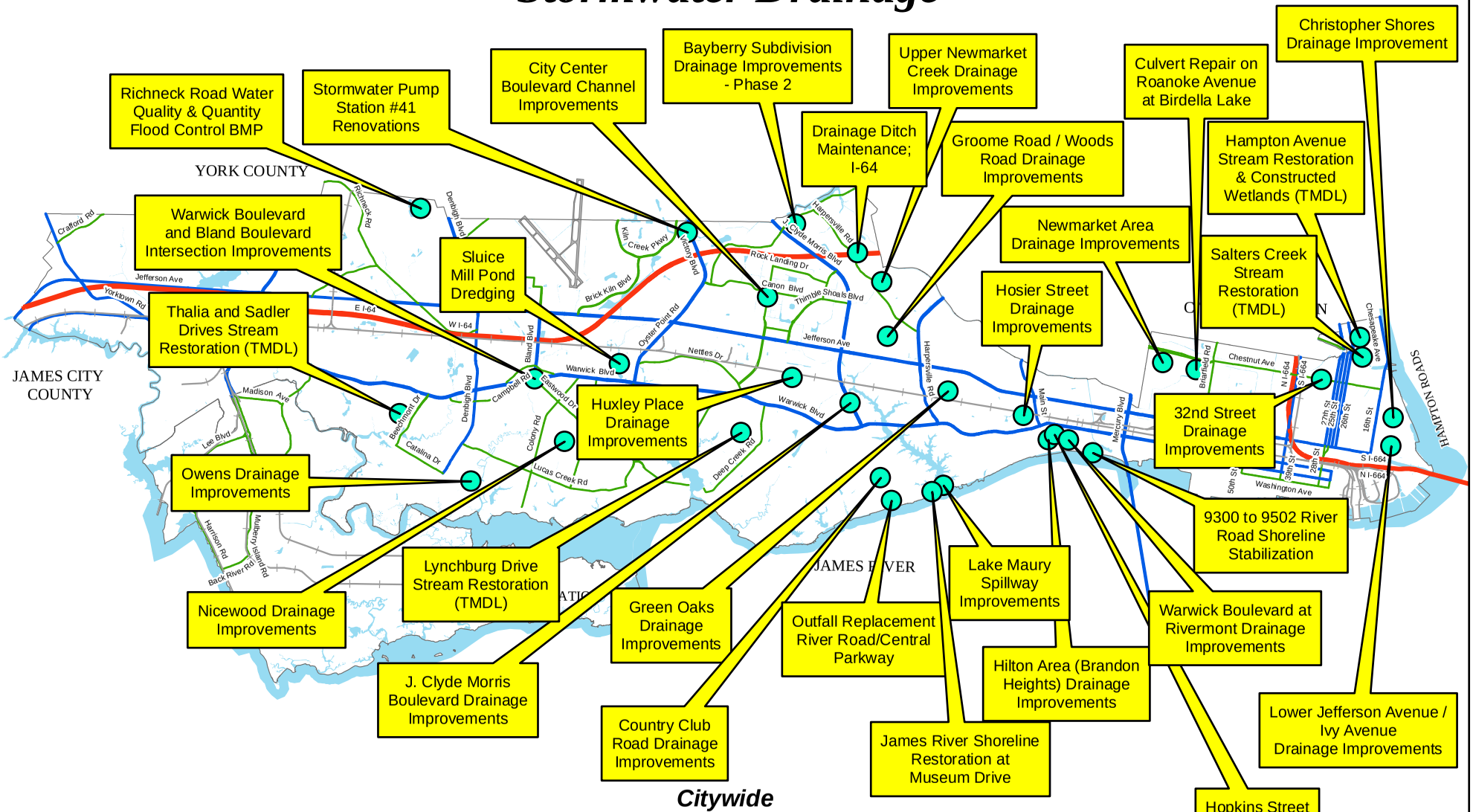
FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$450,000					**$450,000**
Funding Source Total:	**$450,000**	**-**	**-**	**-**	**-**	**$450,000**
PROJECT COST:						
Construction	$450,000					**$450,000**
Planning/Design						**-**
Project Total:	**$450,000**	**-**	**-**	**-**	**-**	**$450,000**

IMPACT ON OPERATING BUDGET: The office will increase in utility costs due to a new structure but the costs will be offset somewhat because the oldest trailer will no longer be used. There will be some reduction in energy costs due to better insulation and a more efficient HVAC system than in existing trailer.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: 1. Provides permanent and adequate spaces for offices: Landfill, Compost, Household Hazardous Waste and Recycling.
2. Provides better shelter from severe weather (e.g. intense thunderstorms and tornados) than the existing trailer.
3. Provides showers for first aid in the event of a hazardous material spill on an employee.
4. Provides a more secure structure to prevent break-ins.
5. Provides a customer service area separate from the industrial area (improved safety for the public).
6. Provides offices for Parks personnel who will support the City's master plan to develop the landfill site into a park.

STORMWATER DRAINAGE

City of Newport News
Capital Improvements Plan FY2017 - FY2021
Stormwater Drainage



Citywide

Citywide Drainage
Citywide Sliplining Projects
Citywide Swale Projects
Lake Maintenance and Dredging
Stream Restoration Projects
Municipal Separate Storm Sewer System (MS4) Static Water Quality Monitoring Stations

STORMWATER DRAINAGE

Approved

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Citywide Sliplining Projects	$300,000	$300,000	$343,000	$353,000	$365,000	**$1,661,000**
Citywide Swale Projects	$200,000	$200,000	$229,000	$235,000	$242,000	**$1,106,000**
Green Oaks Drainage Improvements - Phase 3	$0	$0	$0	$0	$1,175,000	**$1,175,000**
Hilton Area (Brandon Heights) Drainage Improvements	$0	$1,605,000	$0	$1,775,000	$0	**$3,380,000**
Huxley Place Drainage Improvements	$0	$555,000	$570,000	$0	$605,000	**$1,730,000**
Lake Maintenance and Dredging	$250,000	$0	$585,500	$293,500	$302,500	**$1,431,500**
Lower Jefferson Avenue / Ivy Avenue Drainage Improvements	$0	$167,500	$972,500	$0	$0	**$1,140,000**
Stream Restoration Projects (TMDL)	$250,000	$250,000	$285,500	$293,500	$302,500	**$1,381,500**
*Culvert Repair on Roanoke Avenue at Birdella Lake	$0	$400,000	$0	$0	$0	**$400,000**
*Municipal Separate Storm Sewer System (MS4) Static Water Quality Monitoring Stations	$50,000	$150,000	$150,000	$0	$0	**$350,000**
*Stoney Run Regional BMP Facility (TMDL)	$2,000,000	$0	$0	$0	$0	**$2,000,000**
*Thalia and Sadler Drives Stream Restoration (TMDL)	$81,250	$0	$0	$0	$0	**$81,250**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$3,131,250**	**$3,627,500**	**$3,135,500**	**$2,950,000**	**$2,992,000**	**$15,836,250**
GEN OBLIGATION BOND (GOB)						
27th Street at Buxton Avenue Intersection Grade Adjustment Improvements	$350,000	$0	$0	$0	$0	**$350,000**
32nd Street Drainage Improvements	$0	$0	$444,000	$457,000	$470,000	**$1,371,000**
Christopher Shores Drainage Improvement	$540,000	$0	$0	$0	$0	**$540,000**
Citywide Drainage	$497,500	$347,500	$775,500	$392,000	$642,000	**$2,654,500**
Country Club Road Drainage Improvements	$0	$0	$444,000	$0	$0	**$444,000**
Groome Road / Woods Road Drainage Improvements - Phase 2	$0	$0	$1,375,000	$0	$0	**$1,375,000**
Huxley Place Drainage Improvements	$0	$0	$0	$585,000	$0	**$585,000**
Lake Maury Spillway Improvements	$2,163,000	$0	$0	$0	$0	**$2,163,000**
Newmarket Area Drainage Improvements	$0	$0	$0	$1,065,000	$1,095,000	**$2,160,000**
Stormwater Mapping and Modeling	$0	$500,000	$571,000	$588,000	$605,000	**$2,264,000**
Warwick Boulevard at Rivermont Drainage Improvements	$250,000	$2,150,000	$0	$0	$0	**$2,400,000**
*Bayberry Subdivision Drainage Improvements - Phase 2	$0	$0	$0	$444,000	$0	**$444,000**
*Hampton Avenue Stream Restoration (TMDL)	$81,250	$470,000	$0	$0	$0	**$551,250**
*Hopkins Street Drainage Improvements	$0	$0	$0	$167,000	$0	**$167,000**
*Hosier Street Drainage Improvements	$0	$0	$0	$59,000	$484,500	**$543,500**
*Menchville Marina Shoreline Restoration (TMDL)	$162,000	$0	$0	$0	$0	**$162,000**
*Middle Ground Boulevard Channel Improvements	$0	$0	$55,500	$0	$529,000	**$584,500**
*Outfall Replacement River Road/Central Parkway	$0	$0	$335,000	$0	$0	**$335,000**
*Stormwater Pump Station at Kiln Creek Pond #8	$0	$0	$0	$118,000	$0	**$118,000**
*Thalia and Sadler Drives Stream Restoration (TMDL)	$0	$555,000	$0	$0	$0	**$555,000**
*Upper Newmarket Creek Drainage Improvements	$0	$0	$0	$0	$182,500	**$182,500**
TOTAL GEN OBLIGATION BOND (GOB):	**$4,043,750**	**$4,022,500**	**$4,000,000**	**$3,875,000**	**$4,008,000**	**$19,949,250**
GRANT FUNDING						
27th Street at Buxton Avenue Intersection Grade Adjustment Improvements	$350,000	$0	$0	$0	$0	**$350,000**
*Hampton Avenue Stream Restoration (TMDL)	$81,250	$470,000	$0	$0	$0	**$551,250**
*Menchville Marina Shoreline Restoration (TMDL)	$162,000	$0	$0	$0	$0	**$162,000**
*Stoney Run Regional BMP Facility (TMDL)	$2,000,000	$0	$0	$0	$0	**$2,000,000**

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
*Thalia and Sadler Drives Stream Restoration (TMDL)	$81,250	$555,000	$0	$0	$0	**$636,250**
TOTAL GRANT FUNDING:	**$2,674,500**	**$1,025,000**	**$0**	**$0**	**$0**	**$3,699,500**
STORMWATER DRAINAGE TOTAL:	***$9,849,500***	***$8,675,000***	***$7,135,500***	***$6,825,000***	***$7,000,000***	***$39,485,000***

STORMWATER DRAINAGE

Approved

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
32nd Street Drainage Improvements	$0	$132,600	$300,000	$450,000	$463,000	**$1,345,600**
Christopher Shores Drainage Improvement	$250,000	$0	$0	$0	$0	**$250,000**
Citywide Drainage	$0	$0	$0	$844,000	$870,000	**$1,714,000**
Citywide Pipe Lining Projects	$309,000	$318,250	$327,500	$337,500	$348,800	**$1,641,050**
Citywide Swale Projects	$209,000	$218,250	$227,500	$237,500	$247,800	**$1,140,050**
Culvert Repair on Roanoke Avenue at Birdella Lake	$371,000	$0	$0	$0	$0	**$371,000**
Groome Road / Woods Road Drainage Improvements	$0	$0	$0	$0	$230,000	**$230,000**
Hilton Area (Brandon Heights) Drainage Improvements	$1,540,000	$0	$1,819,000	$0	$0	**$3,359,000**
Huxley Place Drainage Improvements	$515,000	$530,450	$0	$563,000	$0	**$1,608,450**
Lake Maintenance and Dredging	$0	$265,225	$273,000	$281,000	$290,000	**$1,109,225**
Lower Jefferson Avenue and Ivy Avenue Drainage Improvements	$160,000	$930,000	$0	$0	$0	**$1,090,000**
Municipal Separate Storm Sewer System (MS4) Static Water Quality Monitoring Stations	$150,000	$150,000	$0	$0	$0	**$300,000**
Stream Restoration Projects (TMDL)	$0	$265,225	$273,000	$281,000	$290,000	**$1,109,225**
*Lynchburg Drive Stream Restoration (TMDL)	$25,000	$0	$0	$0	$0	**$25,000**
*Nicewood Drainage Improvements	$0	$0	$0	$0	$115,000	**$115,000**
*Owens Drainage Improvements	$0	$0	$0	$0	$174,000	**$174,000**
*Salters Creek Stream Restoration (TMDL)	$154,500	$0	$0	$0	$0	**$154,500**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$3,683,500**	**$2,810,000**	**$3,220,000**	**$2,994,000**	**$3,028,600**	**$15,736,100**
GEN OBLIGATION BOND (GOB)						
Bayberry Subdivision Drainage Improvements - Phase 2	$0	$0	$490,000	$0	$0	**$490,000**
City Center Boulevard Channel Improvements	$0	$53,000	$0	$506,500	$0	**$559,500**
Citywide Drainage	$515,000	$530,450	$820,000	$0	$0	**$1,865,450**
Country Club Road Drainage Improvements	$0	$424,000	$0	$0	$0	**$424,000**
Green Oaks Drainage Improvements	$0	$0	$0	$0	$1,725,000	**$1,725,000**
Hampton Avenue Stream Restoration & Constructed Wetlands (TMDL)	$1,103,750	$0	$0	$0	$0	**$1,103,750**
Hopkins Street Drainage Improvements	$0	$0	$160,000	$1,915,000	$0	**$2,075,000**
Hosier Street Drainage Improvements	$0	$0	$55,000	$437,000	$0	**$492,000**
Huxley Place Drainage Improvements	$0	$0	$546,000	$0	$0	**$546,000**
J. Clyde Morris Boulevard Drainage Improvements	$0	$0	$1,600,000	$0	$0	**$1,600,000**
Lake Maury Spillway Improvements	$1,000,000	$0	$0	$0	$0	**$1,000,000**
Newmarket Area Drainage Improvements	$0	$0	$1,044,000	$1,080,000	$2,318,000	**$4,442,000**
Outfall Replacement River Road/Central Parkway	$0	$335,000	$0	$0	$0	**$335,000**
Stormwater Pump Station #41 Renovations	$0	$132,500	$0	$1,400,000	$0	**$1,532,500**
Thalia and Saddler Drives Stream Restoration (TMDL)	$0	$555,000	$0	$0	$0	**$555,000**
Upper Newmarket Creek Drainage Improvements	$0	$0	$0	$154,500	$870,000	**$1,024,500**
Warwick Boulevard and Bland Boulevard Intersection Improvements	$650,000	$0	$0	$0	$0	**$650,000**
Warwick Boulevard at Rivermont Drainage Improvements	$2,163,000	$1,485,000	$0	$0	$0	**$3,648,000**
*9300 to 9502 River Road Shoreline Stabilization	$0	$43,750	$306,250	$0	$0	**$350,000**
*Drainage Ditch Maintenance; I-64	$350,200	$0	$0	$0	$0	**$350,200**
*James River Shoreline Restoration at Museum Drive	$0	$0	$0	$0	$1,000,000	**$1,000,000**
*Lynchburg Drive Stream Restoration (TMDL)	$0	$175,000	$0	$0	$0	**$175,000**
*Salters Creek Stream Restoration (TMDL)	$0	$891,000	$0	$0	$0	**$891,000**
*Sluice Mill Pond Dredging	$0	$848,000	$0	$0	$0	**$848,000**
TOTAL GEN OBLIGATION BOND (GOB):	**$5,781,950**	**$5,472,700**	**$5,021,250**	**$5,493,000**	**$5,913,000**	**$27,681,900**

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total

** New Project*

GRANT FUNDING						
Hampton Avenue Stream Restoration & Constructed Wetlands (TMDL)	$86,250	$0	$0	$0	$0	**$86,250**
Thalia and Saddler Drives Stream Restoration (TMDL)	$0	$555,000	$0	$0	$0	**$555,000**
Warwick Boulevard and Bland Boulevard Intersection Improvements	$650,000	$0	$0	$0	$0	**$650,000**
*9300 to 9502 River Road Shoreline Stabilization	$0	$81,250	$568,750	$0	$0	**$650,000**
*Lynchburg Drive Stream Restoration (TMDL)	$25,000	$175,000	$0	$0	$0	**$200,000**
TOTAL GRANT FUNDING:	**$761,250**	**$811,250**	**$568,750**	**$0**	**$0**	**$2,141,250**

OTHER						
Lake Maury Spillway Improvements	$1,210,000	$0	$0	$0	$0	**$1,210,000**
*James River Shoreline Restoration at Museum Drive	$0	$0	$0	$0	$1,318,000	**$1,318,000**
*Richneck Road Water Quality & Quantity Flood Control BMP	$3,500,000	$0	$0	$0	$0	**$3,500,000**
TOTAL OTHER:	**$4,710,000**	**$0**	**$0**	**$0**	**$1,318,000**	**$6,028,000**

STORMWATER DRAINAGE TOTAL:	***$14,936,700***	***$9,093,950***	***$8,810,000***	***$8,487,000***	***$10,259,600***	***$51,587,250***

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	32nd Street Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Mike Moran
PHONE:	9332311
PROJECT LOCATION:	32nd street from Roanoke Avenue to Salters Creek

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,345,600
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The drainage infrastructure within 32nd Street is a major outfall for the Huntington and Newsome communities. There are multiple sink holes along the pipe line within the roadway from Roanoke Avenue to Salters Creek. Sink holes are an indication of deteriorating pipe and/or failing joints. Approximately, 1,925 linear feet of 72-inch storm drain requires rehabilitation or replacement of concrete and corrugated metal piping (CMP). The size of the existing drainage pipe does not allow for rehabilitation by sliplining therefore the old CMP is required to be replaced. CMP is no longer the standard for drainage pipe within City's right-of-way. The new system will be reinforced concrete pipe.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$132,600	$300,000	$450,000	$463,000	**$1,345,600**
Funding Source Total:	**-**	**$132,600**	**$300,000**	**$450,000**	**$463,000**	**$1,345,600**
PROJECT COST:						
Construction			$275,000	$400,000	$400,000	**$1,075,000**
Other		$7,600	$25,000	$50,000	$63,000	**$145,600**
Planning/Design		$125,000				**$125,000**
Project Total:	**-**	**$132,600**	**$300,000**	**$450,000**	**$463,000**	**$1,345,600**

IMPACT ON OPERATING BUDGET: The renewed drainage infrastructure will free up city resources as city crews will no longer need to respond to and repair the recurring sink holes.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The rehabilitation or replacement will renew the life expectancy of the pipe and drainage system for another 50 years. With over four hundred homes in the Huntington and Newsome communities, it will ensure the efficiency of the entire drainage network and continue to provide flood protection for a 10 year storm event. The rehabilitation and replacement will protect the citizens' property and the City's utility infrastructure along the roadway from damage or loss should a failing pipe section collapse completely.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	9300 to 9502 River Road Shoreline Stabilization
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	933-2311
PROJECT LOCATION:	along the James River of City-owned property at 9300 and 9502 River Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,000,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project is to provide stabilization of the shoreline adjacent to River Road to reduce erosion of the existing embankments, loss of shoreline, and protection of the City's roadway and underground utilities. The shoreline extends from the intersection of North Avenue and River Road to South Avenue and River Road. The improvements will be a combination of stone riprap sills protecting a living shoreline area with riprap revetment on steeper slopes to stabilize the embankments and protect against wave action. The City plans to apply for an Army Corp of Engineers CAP Section 14 Grant for this project which would provide 65% federal funding if approved and require a 35% City match.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$43,750	$306,250			**$350,000**
Grant Funding		$81,250	$568,750			**$650,000**
Funding Source Total:	**-**	**$125,000**	**$875,000**	**-**	**-**	**$1,000,000**
PROJECT COST:						
Construction			$875,000			**$875,000**
Planning/Design		$125,000				**$125,000**
Project Total:	**-**	**$125,000**	**$875,000**	**-**	**-**	**$1,000,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will reduce the impact of shoreline erosion of the natural embankments in the area. It will provide a more natural habitat for wildlife and water creatures to thrive in and it will enhance the aesthetics of the area. The living shoreline area has a potential for becoming an area for study by students in city schools ranging from elementary to universities. The project will also provide the general public with an area to enjoy the natural beauty of the James River. It will provide protection of existing utilities such as water and sewer service in River Road.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Bayberry Subdivision Drainage Improvements - Phase 2
DEPARTMENT:	Engineering
CONTACT PERSON:	Mike Moran
PHONE:	9332311
PROJECT LOCATION:	Bayberry Subdivision off Harpersville Road in the Brick Kiln Creek Drainage Basin

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$490,000
NEW PROJECT:	N

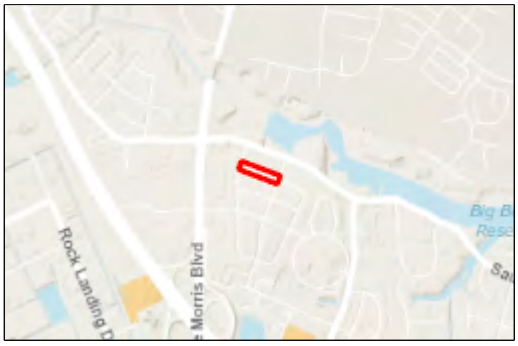
PROJECT DESCRIPTION and/or JUSTIFICATION: The City has been advised of street flooding during minor storm events. Analysis of the storm drainage system indicates that the system does not pass a 2-year storm event. A portion of the stormwater runoff from the subdivision flows into the drainage system of the shopping center on J. Clyde Morris Boulevard then it circles back into the Bayberry Subdivision before it flows to Harpersville Road and discharges into Big Bethel Reservoir. The current drainage system is undersized to handle the amount of rainfall for a 10-year storm event which is the present City standard for storm drainage systems. The proposed construction project will disengage the subdivision's storm drain from the shopping center's drainage system and improve the outfall drainage system for the subdivision.

Phase 1 included improvements to the system in Harpersville Road and the outfall into Big Bethel Reservoir. It began in FY 2016. Phase 2 will improve the drainage system in Wendfield Circle to Traverse Road and connect to Phase 1.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$490,000			**$490,000**
Funding Source Total:	**-**	**-**	**$490,000**	**-**	**-**	**$490,000**
PROJECT COST:						
Construction			$450,000			**$450,000**
Other			$40,000			**$40,000**
Project Total:	**-**	**-**	**$490,000**	**-**	**-**	**$490,000**

IMPACT ON OPERATING BUDGET: The renewed drainage infrastructure will free up City resources as City crews will no longer need to respond to frequent requests for repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Once all construction is complete, the new drainage system will handle the 10-year storm event and relieve street flooding for approximately 145 homes. The drainage improvements will also unburden the shopping center's drainage system from Bayberry's stormwater discharges and that will improve the drainage within the shopping center. The new drainage system will extend the life expectancy by 50 years and reduce the time and effort of City forces to maintain the system. It will decrease the need for funding for frequent repairs.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Christopher Shores Drainage Improvement
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	9332311
PROJECT LOCATION:	Christopher Shores Subdivision, Marshall Place, Shore Drive, Orcutt Avenue and 15th Street

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project consists of construction of a new storm drain system and outfalls to replace an existing system that is outdated and does not conform to present City standards. This project will alleviate ongoing flooding issues caused by rainfall events, storm surges, and tidal action of the Hampton Roads Bay within the existing closed drainage systems in the Christopher Shores area of the southeast community. Street flooding is an issue for residents especially when it concerns the ability to evacuate the area when major storm events are predicted and the close proximity to Hampton Roads Bay. The additional funding is for the replacement of an existing storm drain outfall pipe within the Christopher Shores subdivision that was recently investigated and found to be in need of repair.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$250,000					**$250,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**$250,000**	**-**	**-**	**-**	**-**	**$250,000**
PROJECT COST:						
Construction	$242,500					**$242,500**
Internal Staff Cost						**-**
Other	$7,500					**$7,500**
Planning/Design						**-**
Project Total:	**$250,000**	**-**	**-**	**-**	**-**	**$250,000**

IMPACT ON OPERATING BUDGET: The renewed drainage infrastructure will free up City resources as City crews will no longer need to respond to frequent maintenance requests.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The benefits of the project are the reduction in risk of street flooding in the Christopher Shores area, and a new drainage system that is designed to current Stormwater Management Standards (ability to conduct runoff from a 10-year storm event). The new drainage systems will extend the life expectancy by 50 years. This will reduce the time and effort of City forces to maintain the system and decreasing the need for funding for frequent repairs.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	City Center Boulevard Channel Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	9332311
PROJECT LOCATION:	A drainage ditch along rear properties from 715 to 815 Middle Ground Boulevard

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

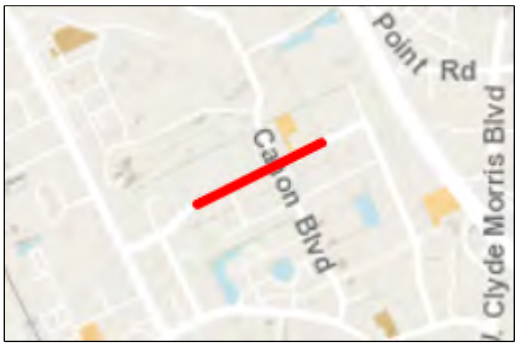
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$559,500
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Concern by businesses and residents in the Brick Kiln Creek watershed regarding the serviceability of the drainage system prompted the City to have a study performed on the drainage basin. The final report indicated that improvements to the existing channel behind the properties along City Center Boulevard will help reduce flooding in specific areas of the basin. Improvements include widening the base of the existing channel and adding an additional pipe culvert at Canon Boulevard. Additional easements may be necessary for the increased area of the open channel at the rear of the properties on City Center Boulevard. These channel improvements are upstream of the stormwater management pond on Canon USA property.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$53,000		$506,500		**$559,500**
Funding Source Total:	**-**	**$53,000**	**-**	**$506,500**	**-**	**$559,500**
PROJECT COST:						
Construction				$425,000		**$425,000**
Other		$3,000		$56,500		**$59,500**
Planning/Design		$50,000				**$50,000**
Site Acquisition				$25,000		**$25,000**
Project Total:	**-**	**$53,000**	**-**	**$506,500**	**-**	**$559,500**

IMPACT ON OPERATING BUDGET: Maintenance of the channel will be reduced as a result of the type of vegetation and stone armament.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Improving the capacity of the open drainage ditch will allow Jefferson Laboratories to provide on-site drainage on their property designed to City standards and discharge to the drainage ditch without causing downstream flooding of properties along City Center Boulevard or into other private property. Seven properties will be directly affected due to the proximity to the drainage ditch. Jefferson Laboratories will be able to construct on-site drainage improvements to alleviate flooding on their property and be able to discharge stormwater runoff directly to the City's drainage system.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Citywide Drainage
DEPARTMENT:	Engineering
CONTACT PERSON:	Vincent Urbano
PHONE:	9332311
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$3,579,450
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project provides funding for small, localized, and/or emergency drainage projects such as pipe cave-ins, ditch and outlet erosion, installation of drainage inlets, and other recurring maintenance-related problems Citywide. Funding is necessary for City crews to provide a quick response to drainage related issues. Costs are for labor and materials to perform the required repairs and improvements. Funds may also be used for property acquisition in environmentally sensitive areas.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget				$844,000	$870,000	**$1,714,000**
Gen Obligation Bond (GOB)	$515,000	$530,450	$820,000			**$1,865,450**
Funding Source Total:	**$515,000**	**$530,450**	**$820,000**	**$844,000**	**$870,000**	**$3,579,450**
PROJECT COST:						
Construction	$500,000	$500,000	$750,000	$750,000	$750,000	**$3,250,000**
Internal Staff Cost						**-**
Other	$15,000	$30,450	$70,000	$94,000	$120,000	**$329,450**
Project Total:	**$515,000**	**$530,450**	**$820,000**	**$844,000**	**$870,000**	**$3,579,450**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Engineering and Public Works maintain a list of drainage-related issues throughout the City ranging from ditch and outfall repairs to spot dredging to pipe installation and/or replacement. The list is reviewed monthly by the departments and minor projects are added and removed during this process. The departments track all minor projects involving design, time of construction, and construction costs.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Citywide Pipe Lining Projects
DEPARTMENT:	Engineering
CONTACT PERSON:	Mike Moran
PHONE:	9332311
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,641,050
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project provides funding for the repair of deteriorating storm pipes throughout the City. A project list is compiled by Public Works Stormwater Division based on 311 calls, repeated trips to repair sink holes along piped drainage systems, and are verified that the pipes qualify for rehabilitation by CCTV inspection. Coordination between Public Works and Engineering determines the priority of the locations to be contracted out for construction. Damaged or deteriorated pipes range from vertical and longitudinal cracks to joint misalignment to spalling and oval shaped cross-sections. Deteriorated pipes reduce a drainage systems' ability to conduct stormwater runoff at its design capacity.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$309,000	$318,250	$327,500	$337,500	$348,800	**$1,641,050**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**$309,000**	**$318,250**	**$327,500**	**$337,500**	**$348,800**	**$1,641,050**
PROJECT COST:						
Construction	$300,000	$300,000	$300,000	$300,000	$300,000	**$1,500,000**
Internal Staff Cost						**-**
Other	$9,000	$18,250	$27,500	$37,500	$48,800	**$141,050**
Project Total:	**$309,000**	**$318,250**	**$327,500**	**$337,500**	**$348,800**	**$1,641,050**

IMPACT ON OPERATING BUDGET: The renewed drainage infrastructure will free up City resources as City crews will no longer need to respond to and repair recurring sink holes.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Pipe lining saves the City time, money and allows us to repair thousands of feet of storm drain quickly and efficiently all over the City. Conventional repair of storm drains would have to be excavated. This method disrupts our citizen's lives and property. Pipe lining can potentially increase the drainage systems flow capacity, protect the citizen's property and the City's utility infrastructure from damage or loss due to sink holes expanding.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Citywide Swale Projects
DEPARTMENT:	Engineering
CONTACT PERSON:	Elsy Blanco
PHONE:	9332311
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,140,050
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project funds the repair of damaged concrete swales across the City identified by Public Works or from property owner notification. Swales conduct stormwater runoff from small drainage areas to larger drainage systems and can be damaged by vegetation (tree roots) or become deteriorated due to age of the concrete. The damaged swales cause standing water and minor flooding of property. The Engineering Department maintains a list of areas requiring repair to concrete swales and regularly communicates with Public Works regarding the list and prioritizing locations for construction projects.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$209,000	$218,250	$227,500	$237,500	$247,800	**$1,140,050**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**$209,000**	**$218,250**	**$227,500**	**$237,500**	**$247,800**	**$1,140,050**
PROJECT COST:						
Construction	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
Internal Staff Cost						**-**
Other	$9,000	$18,250	$27,500	$37,500	$47,800	**$140,050**
Project Total:	**$209,000**	**$218,250**	**$227,500**	**$237,500**	**$247,800**	**$1,140,050**

IMPACT ON OPERATING BUDGET: Reduce City resources needed to frequently repair deteriorated swales.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The repaired swales allow stormwater runoff to flow to downstream drainage systems and avoid standing water and minor flooding situations. A reduction in standing water correlates to a reduction in requests of mosquito spraying by the City's Vector Control, thus reducing the number of applications which use up the time, material, and funding by City forces. The repaired swales also will extend the life expectancy by 30 years, and reduce the time and effort of City forces to maintain the swales. This will decrease the need for funding for frequent repairs.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Country Club Road Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Mike Moran
PHONE:	9332311
PROJECT LOCATION:	Country Club Road from Shoe Lane south to Woodland Drive

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$424,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will improve the storm sewer system in the Riverside neighborhood to alleviate flooding problems. Residents have informed the City about backyard flooding where old storm sewer pipes have had cave-ins. The storm pipes are old and at the end of the expected lifespan. Several sections of the storm sewer are located in backyards and are covered by sheds, fences, shrubs and trees which can cause major maintenance issues. Public Works is continually performing spot repairs to the drainage pipes and filling in cave-ins in the backyards of residential properties.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$424,000				**$424,000**
Funding Source Total:	**-**	**$424,000**	**-**	**-**	**-**	**$424,000**
PROJECT COST:						
Construction		$400,000				**$400,000**
Other		$24,000				**$24,000**
Project Total:	**-**	**$424,000**	**-**	**-**	**-**	**$424,000**

IMPACT ON OPERATING BUDGET: The new drainage systems will extend the life expectancy by 50 years, thus reducing the time and effort required to for maintenance and will decrease the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Replacement and rehabilitation of the storm pipes would increase the life expectancy for 50 more years. The storm sewer system provides drainage for more than twenty homes. The new storm pipes will help reduce flooding/storm water damage ensuring that the system will continue to provide flood protection for a 10-year storm event (City standard for storm drainage systems in residential areas). Replacement and rehabilitation will prevent damage to the City's roadways, to citizens' private properties, and loss of service of nearby utilities.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Culvert Repair on Roanoke Avenue at Birdella Lake
DEPARTMENT:	Engineering
CONTACT PERSON:	Mohammad Shar
PHONE:	9332311
PROJECT LOCATION:	Roanoke Avenue at Newmarket Creek

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

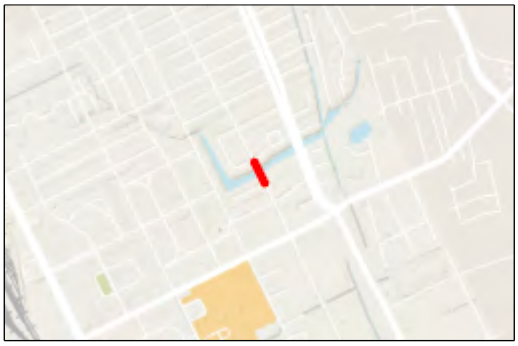
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$371,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project addresses sliplining of the existing Corrugated Metal Pipe (CMP) culverts at Roanoke Avenue that allows Newmarket Creek to cross the roadway. The sliplining of the failing pipe is recommended based on recent inspection reports of the structure. A concrete box culvert is proposed to replace the deteriorated CMP culvert. Roanoke Avenue is a major roadway that allows the public to travel north and south within the southeast community of the City. Failure of the culvert will close the roadway and place additional traffic on other roadways, including Chestnut, Orcutt and Marshall Avenues.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$371,000					**$371,000**
Funding Source Total:	**$371,000**	**-**	**-**	**-**	**-**	**$371,000**
PROJECT COST:						
Construction	$360,000					**$360,000**
Other	$11,000					**$11,000**
Project Total:	**$371,000**	**-**	**-**	**-**	**-**	**$371,000**

IMPACT ON OPERATING BUDGET: The repaired culvert will reduce the need of constant maintenance by City staff, thus reducing the cost and manpower necessary to keep the crossing passable.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will reduce the risk of additional traffic loads on adjacent streets by allowing the 4,460 drivers (the calculated average daily traffic load for Roanoke Avenue) to utilize the roadway crossing the culvert. The repaired concrete culvert will be designed to handle a 25-year rainfall storm event. It will also extend the lifespan of the crossing by 50 years and eliminate the need of constant maintenance by City staff, thus reducing the cost and manpower necessary to keep the crossing passable.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Drainage Ditch Maintenance; I-64
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	933-2311
PROJECT LOCATION:	Drainage System outfalls from Cloverleaf Apartments and Beechlake Estates

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

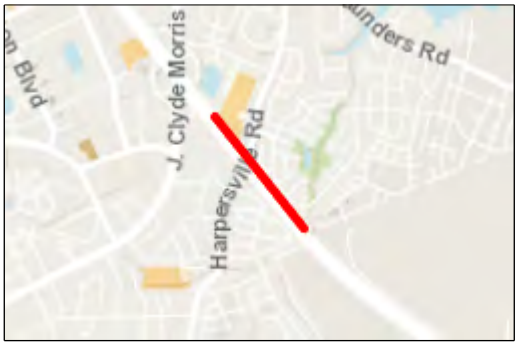
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$350,200
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will remove and dispose of vegetation and accumulated sediment from within the channel cross-section. It will re-establish the positive grade along the channel invert to promote flow of stormwater runoff to the appropriate outfalls. The project will install a riprap outfall protection at existing outfalls into major drainage ditches. Several outfall pipes from the Beechlake Estates Subdivision discharge stormwater runoff to the drainage ditches which are experiencing backflow due to the vegetation and sediment within the channel invert. Work does not alter the hydraulics of the ditches, but re-establishes capacity of the ditches.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$350,200					**$350,200**
Funding Source Total:	**$350,200**	**-**	**-**	**-**	**-**	**$350,200**
PROJECT COST:						
Construction	$340,000					**$340,000**
Other	$10,200					**$10,200**
Project Total:	**$350,200**	**-**	**-**	**-**	**-**	**$350,200**

IMPACT ON OPERATING BUDGET: The new drainage systems will extend the life expectancy by 50 years, thus reducing the time and effort required to for maintenance and will decrease the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Roadway and property flooding caused by the high tailwater conditions within the interstate drainage ditches will be reduced for the residents in the Beechlake Estates subdivision. Approximately 30 properties are affected by the backwater effect of the drainage systems within the subdivision.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Green Oaks Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Elsy Blanco
PHONE:	9332311
PROJECT LOCATION:	Intersection of Tyler Avenue and Smith Lane to Intersection of Tyler and Green Oaks Drive

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

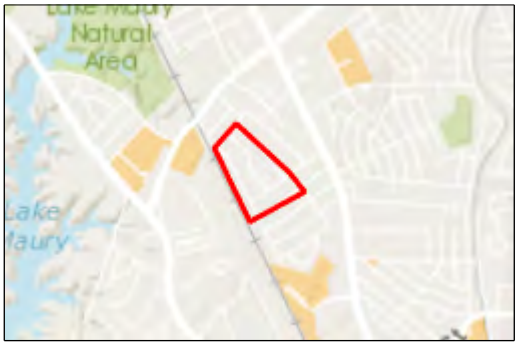
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,725,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will upgrade the drainage system within the City's right-of-way in the Green Oaks subdivision of the City. Phase 3 is the final phase of this project. Prior phases have improved the drainage system from the outfall into Lake Maury upstream past the CSX railroad crossing to Smith Lane. The limits of the project are along Tyler Avenue from Green Oaks Road to Smith Lane; both in the right-of-way and along rear yards adjacent to CSX property. Localized flooding of rear yards and the streets is an ongoing problem in the area.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$1,725,000	**$1,725,000**
Funding Source Total:	-	-	-	-	**$1,725,000**	**$1,725,000**
PROJECT COST:						
Construction					$1,500,000	**$1,500,000**
Other					$225,000	**$225,000**
Project Total:	-	-	-	-	**$1,725,000**	**$1,725,000**

IMPACT ON OPERATING BUDGET: The proposed improvements will extend the life expectancy of the drainage system by 50 years and will be designed to current Stormwater Management Standards. These improvements will reduce the time and effort required for maintenance and decreases the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project (completed in three phases) will reduce the likelihood of flooding and associated damage due to flooding of streets and properties along Tyler Avenue. Approximately, 60 homes in the Green Oaks subdivision will benefit from the improved drainage system.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Groome Road / Woods Road Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Elsy Blanco
PHONE:	9332311
PROJECT LOCATION:	Neighborhood between Jefferson Avenue, Robinson Drive, and Harpersville Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$230,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Project involves improvements to the existing drainage system in the residential area that outfalls across Jefferson Avenue to Deer Park Lake. The project has been divided into several phases to combine similar types of improvements, such as open channel versus closed pipe system installation. Residents in the Robinson Tract and Warwick Villa subdivisions are experiencing flooding of streets and backyards due to the lack of capacity and age of the existing drainage systems.

Phase 2 consists of regrading roadside ditches and replacing existing roadside pipes and culverts with larger pipes. The drainage system upgrading will start at the intersection of Jefferson Avenue and Groome Road, will run along Groome Road towards the intersection with Woods Road, and will turn on Woods Road to connect to newly placed pipe on Woods Road as part of Phase 1.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget					$230,000	**$230,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**-**	**-**	**-**	**-**	**$230,000**	**$230,000**
PROJECT COST:						
Construction						**-**
Other					$30,000	**$30,000**
Planning/Design					$200,000	**$200,000**
Project Total:	**-**	**-**	**-**	**-**	**$230,000**	**$230,000**

IMPACT ON OPERATING BUDGET: The new drainage systems will extend the life expectancy by 50 years, reduce the time and effort required to maintain the systems, and decrease the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project involves improvements to the existing drainage system in the residential area that outfalls across Jefferson Avenue to Deer Park Lake. The project has been divided into several phases to combine similar types of improvements, such as open channel versus closed pipe system installation. Residents in the Robinson Tract and Warwick Villa subdivisions are experiencing flooding of streets and backyards due to the lack of capacity and age of the existing drainage systems.

Phase 2 consists of regrading roadside ditches and replacing existing roadside pipes and culverts with larger pipes. The drainage system upgrading will start at the intersection of Jefferson Avenue and Groome Road, will run along Groome Road towards the intersection with Woods Road, and will turn on Woods Road to connect to newly placed pipe on Woods Road as part of Phase 1.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Hampton Avenue Stream Restoration & Constructed Wetlands (TMDL)
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	9332311
PROJECT LOCATION:	Existing drainage channel parallel to Hampton Avenue from Pine Avenue to Buxton Avenue

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,190,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The Hampton Avenue channel is an existing drainage channel that receives stormwater runoff from residential areas and discharges the runoff to Salters Creek upstream of the Peterson's Yacht Basin area. The channel constantly attracts undesirable creatures such as snakes, as well as invasive vegetation. A new channel that is approximately 1,300 linear feet long will be designed using current standards and constructed to conduct stormwater runoff including the replacement of 3 culverts, as well as handle the tidal effects of Salters Creek.

The added features to the area will be tidal and constructed wetlands BMPs. The tidal wetlands BMPs will provide additional storage volume to reduce peak flows and water quality within the drainage area. The constructed wetlands BMPs are for water quality purposes where none existing presently. These facilities will provide water quality for the existing urban development in the drainage area and allow the City to obtain credit for its Total Maximum Daily Load (TMDL) requirements. The City applied for Department of Environmental Quality (DEQ) Stormwater Local Assistance Fund (SLAF) 50/50 matching funds for the constructed wetlands portion of this project in FY 2015.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$1,103,750					**$1,103,750**
Grant Funding	$86,250					**$86,250**
Funding Source Total:	**$1,190,000**	**-**	**-**	**-**	**-**	**$1,190,000**
PROJECT COST:						
Construction	$1,140,000					**$1,140,000**
Internal Staff Cost						**-**
Other	$50,000					**$50,000**
Planning/Design						**-**
Project Total:	**$1,190,000**	**-**	**-**	**-**	**-**	**$1,190,000**

IMPACT ON OPERATING BUDGET: Maintenance of the channel will be reduced as a result of the type of vegetation and stone armament.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The new channel will conduct stormwater runoff from storm events up to the 10-year through its cross-section without overtopping its banks. Proposed naturally occurring non-invasive vegetation and stone armament will discourage undesirable creatures from inhabiting the area and promote bird and other beneficial wildlife habitation to the area. The service life of the drainage channel will be extended due to the improvements. The project will reduce flooding issues and vermin nuisance.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Hilton Area (Brandon Heights) Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Cathleen Saunders
PHONE:	9332311
PROJECT LOCATION:	Hilton Village, Brandon Heights

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$3,359,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The City has been advised of flooding in area backyards where old storm sewer pipe cave-ins have occurred. A recent storm sewer model analysis identifies that the existing system is inadequate and confirms reports of localized flooding. After additional investigations by Public Works, initiated from resident reports of flooding on their properties, this project has been expanded from 2 to 3 phases:

Phase 1, scheduled for construction in FY 2015, included the design and construction of a new trunk storm sewer system along River Road, Milford Road, and Ferguson Avenue up to Westover Road. The project will be constructed within the City's right-of-way to alleviate flooding of the roads during a 10-year storm event or less.

Phase 2 includes the construction of a new trunk storm sewer in Ferguson Avenue from Westover Road to Stratford Road. Upgrades will also be installed along Stratford Road and into low lying back yards where the existing pipe has failed and is causing flooding. This phase is to alleviate flooding of houses and personal property due to failed City lines within backyards, as well as reduce flooding along these roadways and intersections.

Phase 3 includes design and construction for upgrade and possibly relocation of the failed storm sewer behind the houses along Milford Road. This phase will alleviate flooding of houses and personal property due to failed City lines within backyards, as well as reduce flooding along these roadways and intersections.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$1,540,000		$1,819,000			**$3,359,000**
Gen Obligation Bond (GOB)						**-**
Funding Source Total:	**$1,540,000**	**-**	**$1,819,000**	**-**	**-**	**$3,359,000**
PROJECT COST:						
Construction	$1,345,000		$1,665,000			**$3,010,000**
Other	$45,000		$154,000			**$199,000**
Planning/Design	$150,000					**$150,000**
Project Total:	**$1,540,000**	**-**	**$1,819,000**	**-**	**-**	**$3,359,000**

IMPACT ON OPERATING BUDGET: The new drainage systems will extend the life expectancy by 50 years, thus reducing the time and effort required to for maintenance and will decrease the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The benefits of the three phases of the project are the reduction in risk of flooding and damages due to flooding to businesses and citizens' properties along the streets, and new drainage systems that are designed to present stormwater management standards. Approximately 160 homes and approximately 5,700 LF of roadway will benefit from the installation of the stormwater drainage systems.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Hopkins Street Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Cathleen Saunders
PHONE:	9332311
PROJECT LOCATION:	Hilton Village area; Warwick Boulevard to River Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$2,075,000
NEW PROJECT:	N

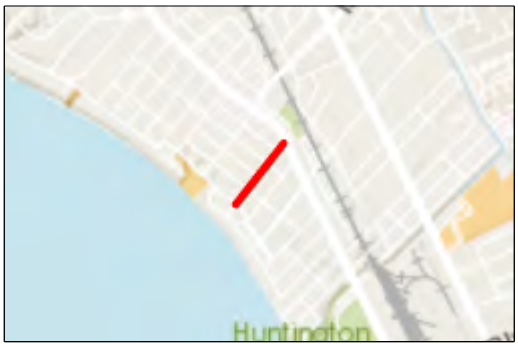
PROJECT DESCRIPTION and/or JUSTIFICATION: Property owners along Hopkins Street have advised of flooding issues and stormwater runoff backing up on properties due to the present storm sewer system. Upon investigation by Public Works, pipes along several backyards were found to be failing due to the age of the existing drainage system. Several sections of the storm sewer are covered by sheds, fences, shrubs, and trees, which can cause major maintenance issues.

The design and construction of this project will relocate the existing storm sewer system into Hopkins Street, a public right-of-way. The new drainage system will tie into the existing drainage downstream of the problem areas where it is already within City right-of-way. Future maintenance of the drainage system can be performed by City forces without having to obtain permission to enter private property and possibly disturb structures, fences, trees, and shrubs.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$160,000	$1,915,000		**$2,075,000**
Funding Source Total:	**-**	**-**	**$160,000**	**$1,915,000**	**-**	**$2,075,000**
PROJECT COST:						
Construction				$1,700,000		**$1,700,000**
Other			$15,000	$215,000		**$230,000**
Planning/Design			$145,000			**$145,000**
Project Total:	**-**	**-**	**$160,000**	**$1,915,000**	**-**	**$2,075,000**

IMPACT ON OPERATING BUDGET: The proposed improvements will extend the life expectancy of the drainage system by 50 years, thus reducing the time and effort required for maintenance and decreasing the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Project benefits include reduction in risk of flooding and associated damages due to flooding to private properties along Piez, Hurley, Palen, Ferguson Avenues and Hopkins Street. The new drainage system will be designed to present Stormwater Management Standards to conduct runoff from a 10-year storm event. Approximately, 60 homes and 2,000 LF of roadway will benefit from the installation of the stormwater drainage systems.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Hosier Street Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	9332311
PROJECT LOCATION:	Properties along Hosier Street from Westover Road to Mattox Drive

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$492,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Residents along Hosier Street have experienced flooding along the rear of properties that abut the CSX right-of-way. There are limited drainage systems in the area ranging from swales and small ditches to short runs of pipe with shallow slopes. The CSX railroad is higher in elevation than the backyards along Hosier Road causing standing water to accumulate during minor storm events. A new drainage system designed to today's City standards will alleviate flooding of the properties for a 10-year storm event.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$55,000	$437,000		**$492,000**
Funding Source Total:	**-**	**-**	**$55,000**	**$437,000**	**-**	**$492,000**
PROJECT COST:						
Construction				$387,000		**$387,000**
Other			$5,000	$50,000		**$55,000**
Planning/Design			$50,000			**$50,000**
Project Total:	**-**	**-**	**$55,000**	**$437,000**	**-**	**$492,000**

IMPACT ON OPERATING BUDGET: The new drainage systems will extend the life expectancy by 50 years, thus reducing the time and effort required to for maintenance and will decrease the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Project benefits include reduction in risk of street flooding in the North Hilton area. The proposed drainage system will be designed to current Stormwater Management Standards to conduct runoff from a 10-year storm event. Project improvements will extend the life expectancy of the drainage system by 50 years, the time and effort required for maintenance and decreasing the need for funding for frequent repairs.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Huxley Place Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Mike Moran
PHONE:	9332311
PROJECT LOCATION:	Glendale Subdivision

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

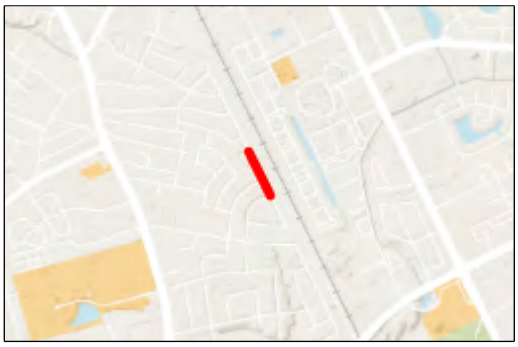
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$2,154,450
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will repair deteriorating corrugated metal storm pipes throughout the neighborhood and provide necessary drainage improvements. The storm pipes are collapsing in several areas, specifically under the roadway of Lynn Drive and Huxley Place below Dove Court. The storm pipes are old and at the end of the expected lifespan. Metal pipes are no longer the standard material for storm drains and replacing drain pipes with concrete pipes is a goal of the City to improve its drainage systems. Further deterioration of the metal pipes could lead to sinkholes and depressions causing risk to structures, roads, and public health. The cost includes design efforts to provide the improvements and the cost for construction of those improvements.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$515,000	$530,450		$563,000		**$1,608,450**
Gen Obligation Bond (GOB)			$546,000			**$546,000**
Funding Source Total:	**$515,000**	**$530,450**	**$546,000**	**$563,000**	**-**	**$2,154,450**
PROJECT COST:						
Construction	$500,000	$500,000	$500,000	$500,000		**$2,000,000**
Other	$15,000	$30,450	$46,000	$63,000		**$154,450**
Planning/Design						**-**
Project Total:	**$515,000**	**$530,450**	**$546,000**	**$563,000**	**-**	**$2,154,450**

IMPACT ON OPERATING BUDGET: The new drainage systems will extend the life expectancy by 50 years, thus reducing the time and effort required to for maintenance and will decrease the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Replacement and rehabilitation of the storm pipes would increase the life expectancy of the storm drainage system for 50 years. The storm sewer system provides drainage for more than fifty homes. The new storm pipes will help reduce flooding/storm water damage. This will ensure that the system will continue to provide flood protection for the 10-year storm event (the City standard for storm drainage systems in residential areas). Replacement and rehabilitation will prevent damage to the City's roadways, to citizens' private properties, and loss of service of nearby utilities.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	J. Clyde Morris Boulevard Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Mike Moran
PHONE:	
PROJECT LOCATION:	J. Clyde Morris Boulevard between the CSX overpass and Warwick Boulevard

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,600,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Current median guard rails are not AASHTO compliant and cannot be brought up to code. In order to eliminate the guardrails, the existing median drainage channel will need to be piped and filled to remove the hazard. This project will eliminate the three deep median ditches along J. Clyde Morris Boulevard in the area of Riverside Regional Medical Center. The removal of the ditches will remove the roadside hazard creating the current need for a guardrail system. The installation of rain gardens will provide water quality treatment while giving the City TMDL credits and providing additional areas for enhanced landscaping in the City's Arts District.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$1,600,000			**$1,600,000**
Funding Source Total:	**-**	**-**	**$1,600,000**	**-**	**-**	**$1,600,000**
PROJECT COST:						
Construction			$1,600,000			**$1,600,000**
Project Total:	**-**	**-**	**$1,600,000**	**-**	**-**	**$1,600,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will improve visibility for roadway users, remove crash hazards from within the roadway, improve the safety of motorists and enhance the aesthetics of the area.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	James River Shoreline Restoration at Museum Drive
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	933-2311
PROJECT LOCATION:	adjacent to Lake Maury Dam and the Lions' Bridge

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$2,318,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will restore and stabilize the shoreline adjacent to Museum Parkway and Museum Drive to reduce erosion of the existing embankments and loss of shoreline. Phase 1 is approximately 860 linear feet along Museum Parkway from the residence at 101 Museum Parkway to the intersection of Museum Parkway with Museum Drive. This phase was completed in conjunction with the Kettle Pond Outfall Replacement project. Phase 2 is approximately 1,200 linear feet along Museum Drive from the same intersection to the residence at 25 Museum Drive. The improvements include construction of riprap sills, marsh planted areas, riprap revetments, and stone breakwaters. The marsh planted areas are living shorelines where water-dependent and land creatures can thrive. Revetments protect the shorelines from wave action during storm events and breakwaters can create sandy beach areas.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)					$1,000,000	**$1,000,000**
Other					$1,318,000	**$1,318,000**
Funding Source Total:	**-**	**-**	**-**	**-**	**$2,318,000**	**$2,318,000**
PROJECT COST:						
Construction					$2,000,000	**$2,000,000**
Other					$318,000	**$318,000**
Project Total:	**-**	**-**	**-**	**-**	**$2,318,000**	**$2,318,000**

IMPACT ON OPERATING BUDGET: Other funding source represents Use of Fund Balance from the Lake Maury Fund. Debt service related to this project will be paid from the Lake Maury Fund.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project reduces the impact of shoreline erosion of the natural embankments in the area. It provides a more natural habitat for wildlife and water creatures to thrive in while enhancing the aesthetics of the area. This is potential for becoming an area for study by students in City schools ranging from elementary to universities. The project provides the general public an area to enjoy the natural beauty of the James River.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Lake Maintenance and Dredging		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Jamie Clark	**PHONE:**	9332311
PROJECT LOCATION:	Citywide		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	X
	CITYWIDE	X		Fiscal Mgt & Efficient Ops	
				Max Emphasis Public Safety	
PROJECT CATEGORY:	Stormwater Drainage			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$1,109,225	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project provides funding for ongoing maintenance of citywide lakes and ponds that receive and conduct stormwater runoff from public rights-of-way as part of the City stormwater infrastructure. Dredging removes the buildup of sediments within the lakes and ponds. An added benefit to the removal of sediments is the reduction in pollutants, such as phosphorus and nitrogen that attach to the sediment, thus improving the water quality within a lake or pond.

Maintenance includes replacement and/or installation of risers and other outfall structures and the control of noxious vegetation on the lakes and ponds throughout the City. Improvements to lakes and ponds that are accepted into the City's Lake Enhancement Program include aquascaping (establishing shoreline vegetation) and aeration. Aquascaping and aeration also enhance the water quality within a lake or pond by providing shoreline vegetation that uptakes pollutants and circulation of water to inhibit the formation of algae blooms and accumulation of other noxious weeds, as well as reduce the risk of fish kills.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$265,225	$273,000	$281,000	$290,000	**$1,109,225**
Gen Obligation Bond (GOB)						**-**
Other						**-**
Stormwater Mgmt Fund						**-**
Funding Source Total:	**-**	**$265,225**	**$273,000**	**$281,000**	**$290,000**	**$1,109,225**
PROJECT COST:						
Construction		$250,000	$250,000	$250,000	$250,000	**$1,000,000**
Internal Staff Cost						**-**
Other		$15,225	$23,000	$31,000	$40,000	**$109,225**
Project Total:	**-**	**$265,225**	**$273,000**	**$281,000**	**$290,000**	**$1,109,225**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Dredging of a lake or pond removes the accumulation of sediments which allows a lake or pond to return to its normal function as a water quantity feature by re-establishing its volume to accept additional stormwater runoff. Maintenance of risers and outfall structures ensures that a lake or pond maintains the correct depth and the discharge of runoff does not cause downstream erosion or flooding. The benefits to dredging and maintenance are decrease to the risk of flooding, promotion of the habitation of fish and other water-borne creatures, and reduction of orders and algae/weed infestations.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Lake Maury Spillway Improvements		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Jamie Clark	**PHONE:**	933-2311
PROJECT LOCATION:	Lake Maury Dam at Lions Bridge		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL	X		Environmental Sustainability	
	NORTH			Community Renewal & Maint	X
	CITYWIDE			Fiscal Mgt & Efficient Ops	
				Max Emphasis Public Safety	X
PROJECT CATEGORY:	Stormwater Drainage			Mandated/Legal Requirement	X

TOTAL ESTIMATED COST:	$2,210,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will provide improvements such as an emergency spillway channel, an additional culvert under Museum Drive at the main outfall to Lake Maury, a labyrinth weir structure to control the lake elevation and flow from Lake Maury, stabilization of the lakeside wall of the Lions' Bridge, and armoring of the downstream slope of the impounding structure. These improvements are necessary for the dam to receive certification of operation and maintenance from the State Department of Conservation and Recreation, Dam Safety Division. The present spillway operation has stop-logs that are removed or replaced by Mariners' Museum staff using a crane to lift and place the logs. The dam has been overtopped by large storm events, which has required repair to erosion damaged area downstream of the structure as well as around the main outfall.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$1,000,000					**$1,000,000**
Other	$1,210,000					**$1,210,000**
Funding Source Total:	**$2,210,000**	**-**	**-**	**-**	**-**	**$2,210,000**
PROJECT COST:						
Construction	$2,000,000					**$2,000,000**
Other	$60,000					**$60,000**
Planning/Design	$150,000					**$150,000**
Project Total:	**$2,210,000**	**-**	**-**	**-**	**-**	**$2,210,000**

IMPACT ON OPERATING BUDGET: Other funding source represents Use of Fund Balance from the Lake Maury Fund. Debt service related to this project will be paid from the Lake Maury Fund.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Facilities will pass the required storm event, the Spillway Design Flood, for this type of impounding structure without the risk of failure to the dam. Certification of Operation and Maintenance was granted by DCR, Dam Safety Division. The project will implement safety measures, such as warning signs and/or lights to indicate overtopping of the roadway, an Emergency Action Plan that states the required procedures to follow during large storm events relating to contacting authorities and provide public information about the condition of the dam.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Lower Jefferson Avenue and Ivy Avenue Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	9332311
PROJECT LOCATION:	Jefferson Avenue and Ivy Avenue; 20th to 12th Streets

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,090,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: A recent mapping and modeling study of the Small Boat Harbor Drainage Basin completed in 2013 determined that drainage improvements are needed in the area to reduce the risk of flooding on City streets and increase the level of service of the drainage for the basin. This project will construct drainage improvements along lower Jefferson Avenue and Ivy Avenue by replacing failing drainage pipes and relocating drainage systems out of private properties into City right-of-way. The modeling of the system indicated a need to upgrade the existing drainage system from 20th Street to the 9th Street and Ivy Avenue to Jefferson Avenue.

New drainage systems will improve the drainage in the southeast area and as well as divert stormwater runoff collected from public right-of-way from entering the drainage pipe that is under an existing building of a business on Jefferson Avenue. The initial phase of the project will be to relocate and upgrade the drainage systems in and around Ridley Circle, 16th Street, and Jefferson Avenue. This phase will coordinate with the proposed utility improvements of the lower Jefferson Avenue Streetscape project (12th to 24th Streets). Future phases will be designed and constructed as funding is determined.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$160,000	$930,000				**$1,090,000**
Funding Source Total:	**$160,000**	**$930,000**	**-**	**-**	**-**	**$1,090,000**
PROJECT COST:						
Construction		$876,000				**$876,000**
Other	$10,000	$54,000				**$64,000**
Planning/Design	$150,000					**$150,000**
Project Total:	**$160,000**	**$930,000**	**-**	**-**	**-**	**$1,090,000**

IMPACT ON OPERATING BUDGET: The new drainage systems will extend the life expectancy by 50 years, thus reducing the time and effort required to for maintenance and will decrease the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The benefits of the project are the reduction in risk of street flooding along Jefferson Avenue and Ivy Avenue, and a new drainage system that is designed to current Stormwater Management Standards (able to conduct runoff from a 10-year storm event). The new system will also eliminate the hazard of an active drainage pipe under a private structure. The proposed project will improve the level of service and extend the life expectancy of the drainage system by 50 years, thus reducing the time and effort required for maintenance and decreasing the need for funding for frequent repairs.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Lynchburg Drive Stream Restoration (TMDL)
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	933-2311
PROJECT LOCATION:	rear yards of 329-333 Lynchburg Drive in the Hidden Estates Subdivision

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

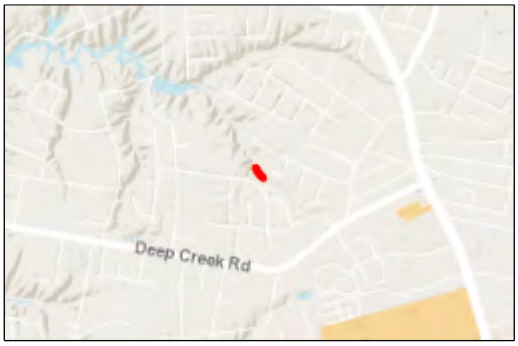
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$400,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The existing drainage channel at the rear of residential properties along Lynchburg Drive from 329-333 is experiencing erosion and has deteriorated to a point where it is causing flooding in the rear portions of private properties and instability of mature trees adjacent to the channel. This channel conducts stormwater runoff from several public right-of-ways such as Jamestown Road, Turlington Road, and Deep Creek Road. The project will include providing a stable and constant cross-section with applicable natural and stone armaments for conducting stormwater runoff from a 10-year storm event. Easements will be required on properties for construction purposes. The design of an urban stream restoration typically involves using plunge pools at outfalls, riprap for bank protection or as an energy dissipator, J-hooks and cross-vanes, log and rock sills to serve as grade controls, and the planting of vegetation to help stabilize the channel.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$25,000					**$25,000**
Gen Obligation Bond (GOB)		$175,000				**$175,000**
Grant Funding	$25,000	$175,000				**$200,000**
Funding Source Total:	**$50,000**	**$350,000**	**-**	**-**	**-**	**$400,000**
PROJECT COST:						
Construction		$310,000				**$310,000**
Contingency		$20,000				**$20,000**
Other	$1,500	$10,000				**$11,500**
Planning/Design	$48,500					**$48,500**
Site Acquisition		$10,000				**$10,000**
Project Total:	**$50,000**	**$350,000**	**-**	**-**	**-**	**$400,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project involves stabilization and restoration to keep the beauty of a natural environment while still having the ability to conduct stormwater runoff in an effective and safe manner. The erosion of banks is alleviated, thus reducing the concerns of property owners. The life expectancy of the channels is extended by using current methods of design which reduces the need for channel maintenance. Natural streams also benefit the City by being a water quality feature that reduce the migration of pollutants such as sediment, phosphorus, and nitrogen, and allows the City to take credit for those reductions relative to TMDL requirements.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Municipal Separate Storm Sewer System (MS4) Static Water Quality Monitoring Stations
DEPARTMENT:	Engineering
CONTACT PERSON:	Louis Bott
PHONE:	926-8661
PROJECT LOCATION:	Citywide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$300,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will establish permanent water quality monitoring stations in strategic sites throughout the City to meet regulatory requirements for water quality sampling and analysis under the Municipal Separate Storm Sewer System permit issued by Department of Environmental Quality. The frequency and types of water quality analysis are expected to significantly increase due to recent changes to Stormwater Management Regulations in Virginia. The ability to identify and target areas in the City is essential for the appropriate application of funds and resources needed to meet permit criteria for water quality improvement mandated by the State and to mitigate the effects of untreated stormwater from private lands and development.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$150,000	$150,000				**$300,000**
Funding Source Total:	**$150,000**	**$150,000**	**-**	**-**	**-**	**$300,000**
PROJECT COST:						
Construction	$125,000	$125,000				**$250,000**
Contingency	$25,000	$25,000				**$50,000**
Planning/Design						**-**
Project Total:	**$150,000**	**$150,000**	**-**	**-**	**-**	**$300,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will improve local water quality which sustains and continually improves recreation and commercial opportunities for citizens. It will balance local water quality improvement and economic interests relative to land use planning and development by providing data for use in reducing impacts of non-point source pollution.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Newmarket Area Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Mohammad Shar
PHONE:	9332311
PROJECT LOCATION:	Area bounded by Orcutt Avenue, Chestnut Avenue and 72nd through 80th Streets

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$4,442,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will upgrade the City's drainage system within the Newmarket area. The project area extends from Jarvis Place to the existing ditch east of Chestnut Avenue between 72nd and 80th Streets. This project addresses replacement and improvement of the existing drainage system behind properties in the area. A previous study of the area revealed poor drainage and flooding. The majority of the area has defective, failing non-reinforced concrete pipes. These failing pipes can cause sinkholes and depressions that could affect structures and roadways where the pipes cross under.

Phase I will be replacing and upgrading (if needed) the storm piping systems that outfalls into two different outfall areas. These two outfall areas are located along the drainage ditch at the north-east end of Chestnut Ave from 72nd to 80th Streets, and the other one is located along the drainage ditch at south-west end of Jarvis Place.

Phase II of the project will be executed in two Steps: Step I will be heavy cleaning, videoing and analyzing of the storm piping system's existing condition. Step II will be designing and preparing construction plans. The location of this phase is almost in the middle or upper stream portion of the overall project area. Its pipe sizes are relatively smaller than the Phase I pipe sizes.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)			$1,044,000	$1,080,000	$2,318,000	**$4,442,000**
Funding Source Total:	**-**	**-**	**$1,044,000**	**$1,080,000**	**$2,318,000**	**$4,442,000**
PROJECT COST:						
Construction			$950,000	$950,000	$2,000,000	**$3,900,000**
Other			$94,000	$130,000	$318,000	**$542,000**
Project Total:	**-**	**-**	**$1,044,000**	**$1,080,000**	**$2,318,000**	**$4,442,000**

IMPACT ON OPERATING BUDGET: The new drainage systems will extend the life expectancy by 50 years, thus reducing the time and effort required to for maintenance and will decrease the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will improve and adjust the neighborhood's existing drainage system with new reinforced concrete pipes to accommodate the 10-year rainfall storm event per the City's design standards. It will also prevent street and yard flooding for approximately 350 property owners. The new pipes will extend the life expectancy of the drainage system by 50 years and reduce the need to make spot repairs by City forces. This will reduce the amount of time and effort of City crews, which will save manpower and funding to be used elsewhere.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Nicewood Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Marcus Clements
PHONE:	933-2311
PROJECT LOCATION:	Malden Lane and Maryle Court

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

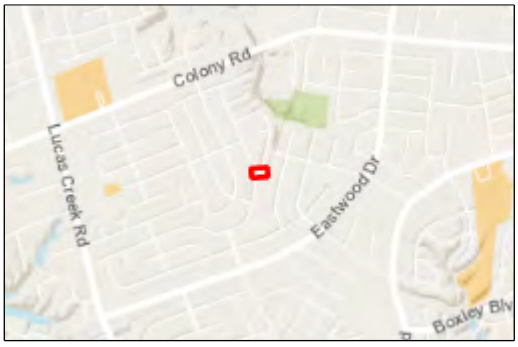
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$115,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The City has been advised of flooding at the intersection of Malden Lane and Maryle Court during significant rain events. A recent storm sewer model identifies that the existing system is inadequate and confirms that flooding occurs. The project could be completed in 1 or 2 phases.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget					$115,000	**$115,000**
Funding Source Total:	-	-	-	-	**$115,000**	**$115,000**
PROJECT COST:						
Other					$15,000	**$15,000**
Planning/Design					$100,000	**$100,000**
Project Total:	-	-	-	-	**$115,000**	**$115,000**

IMPACT ON OPERATING BUDGET: The new drainage system will extend the life expectancy by 50 years, reducing maintenance time and cost. The new system would decrease funding needed for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The benefits of these phases of the project are reduction in risk of flooding and damages, and the new drainage systems will be designed to meet present Stormwater Management Standards. Approximately 70 homes and approximately 2200 LF of roadway will benefit from the installation of the stormwater drainage system within these phases.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Outfall Replacement River Road/Central Parkway
DEPARTMENT:	Engineering
CONTACT PERSON:	Mike Moran
PHONE:	9332311
PROJECT LOCATION:	Intersection of Central Parkway and Riverside Drive

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$335,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace an existing 30" pipe culvert under Riverside Drive with four (4) runs of 27"x42" elliptical reinforced concrete pipes (RCP). The existing pipe culvert is undersized by today's standards for drainage culverts and requires upgrading. The new HERCP will conduct a 10-year storm event without overtopping Riverside Drive. The depth of pipe and existing utilities in the area do not allow for a single run of pipe or box culvert.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$335,000				**$335,000**
Funding Source Total:	**-**	**$335,000**	**-**	**-**	**-**	**$335,000**
PROJECT COST:						
Construction		$315,000				**$315,000**
Other		$20,000				**$20,000**
Project Total:	**-**	**$335,000**	**-**	**-**	**-**	**$335,000**

IMPACT ON OPERATING BUDGET: The project will reduce the amount of City resources when responding to repeated flood complaints.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The new culvert will conform to present City standards for passage of a 10-year storm event for a residential roadway. Riverside Drive will not be required to be closed to traffic for storm events less than a 10-year storm. The service life of the crossing will be extended by the enlarged culvert, thus reducing the amount of time and effort required by City forces to maintain the crossing.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Owens Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Cathleen Saunders
PHONE:	933-2311
PROJECT LOCATION:	62 Owens Road

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

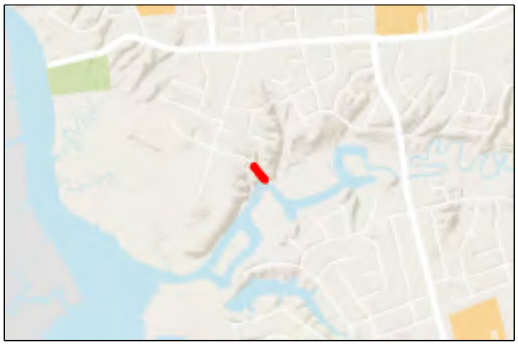
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$174,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: 62 Owens Road has no existing drainage facilities and the roadway itself conveys water to Lucas Creek. This creates a build-up of sediment on the roadway and is a flooding concern for residents. The design of this project will allow for retaining walls to be built around the roadway. These retaining walls will allow for stormwater improvements to be installed along the sides of the road eliminating the sediment and flooding issues. The embankments along the roadway are currently collapsing and the sediments supporting them are washing away due to current stormwater discharge.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget					$174,000	**$174,000**
Funding Source Total:	-	-	-	-	**$174,000**	**$174,000**
PROJECT COST:						
Other					$24,000	**$24,000**
Planning/Design					$150,000	**$150,000**
Project Total:	-	-	-	-	**$174,000**	**$174,000**

IMPACT ON OPERATING BUDGET: The new drainage system will extend the life expectancy by 50 years, thus reducing the time and effort required for maintenance and will decrease the need for funding frequent repairs. Currently, public works must clean out the yard drain at the end of Owen's Road monthly with regular inspections.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The benefits of this project come from the reduction in the risk of flooding and possible residential damages due to the unstabilized embankment. The system that is to be design would help minimize erosion and control flooding within the roadway. Approximately, 14 homes along this roadway would benefit directly from this design.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Richneck Road Water Quality & Quantity Flood Control BMP
DEPARTMENT:	Engineering
CONTACT PERSON:	Cathleen Saunders
PHONE:	926-3530
PROJECT LOCATION:	Between Denbigh Boulevard and Ft. Eustis Boulevard in the proposed Huntington Pointe Subdivision

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

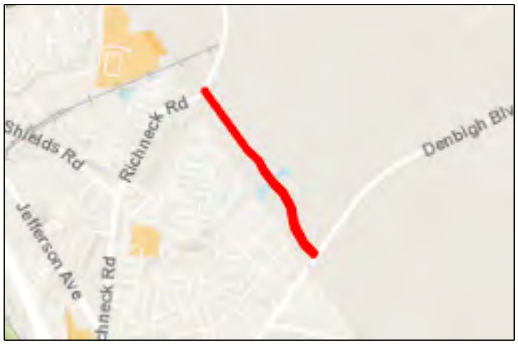
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$3,500,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: See Independence Boulevard project in the Streets & Bridges Category for project detail. Other funding below represents developer contributions toward BMP construction costs. The City's participation has been previously appropriated.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Other	$3,500,000					**$3,500,000**
Funding Source Total:	**$3,500,000**	**-**	**-**	**-**	**-**	**$3,500,000**
PROJECT COST:						
Construction	$3,500,000					**$3,500,000**
Project Total:	**$3,500,000**	**-**	**-**	**-**	**-**	**$3,500,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES:



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Salters Creek Stream Restoration (TMDL)
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	933-2311
PROJECT LOCATION:	Salters Creek from 34th Street to City Line

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

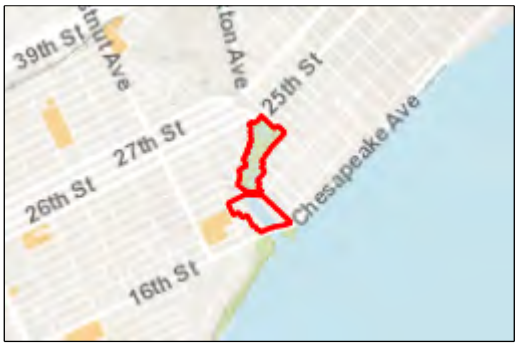
PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,045,500
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The existing drainage channel that receives stormwater runoff from residential areas is part of the Salters Creek upstream drainage system that outfalls to Peterson's Yacht Basin and ultimately Hampton Roads Bay. The channel constantly attracts undesirable creatures including snakes and invasive vegetation, as well as having an inconsistent grade from beginning to the end causing backup of City piped systems and stagnant pools of water. A new channel that is approximately 1,400 linear feet long will be designed and constructed to conduct stormwater runoff using current standards and provide a positive grade to the channel to ensure stormwater runoff flows through the channel as well as connecting drainage systems. This facility will provide water quality for the urban development in the drainage area and allow the City to obtain credit for its Total Maximum Daily Load (TMDL) requirements.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$154,500					**$154,500**
Gen Obligation Bond (GOB)		$891,000				**$891,000**
Funding Source Total:	**$154,500**	**$891,000**	**-**	**-**	**-**	**$1,045,500**
PROJECT COST:						
Construction		$840,000				**$840,000**
Other	$4,500	$51,000				**$55,500**
Planning/Design	$150,000					**$150,000**
Project Total:	**$154,500**	**$891,000**	**-**	**-**	**-**	**$1,045,500**

IMPACT ON OPERATING BUDGET: Maintenance of the channel will be reduced as a result of the type of vegetation and stone armament.



ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The new channel will conduct stormwater runoff from storm events up to the 10-years through its cross-section without overtopping its banks. Proposed naturally occurring non-invasive vegetation and stone armament will discourage undesirable creatures from inhabiting the area and promote bird and other beneficial wildlife habitation to the area. The service life of the drainage channel will be extended due to the improvements.

The project's design will reduce flooding issues and vermin nuisance. It involves stabilization and restoration to keep the beauty of a natural environment while still having the ability to conduct stormwater runoff in an effective and safe manner. The life expectancy of the channels is extended by using current methods of design which reduces the need for channel maintenance. Natural streams also benefit the City by being a water quality feature that reduce the migration of pollutants such as sediment, phosphorus, and nitrogen, and allows the City to take credit for those reductions relative to TMDL requirements.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Sluice Mill Pond Dredging
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	933-2311
PROJECT LOCATION:	Sluice Mill Pond; part of Deek Creek

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

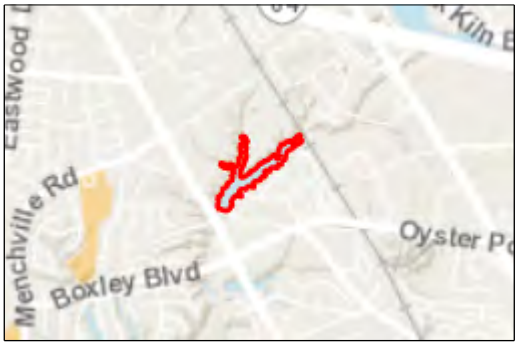
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$848,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The project provides for the removal of accumulated sediment within the pond that is within the Deep Creek watershed and receives stormwater runoff from several residential and commercial areas as well as City property and right-of-way. Sluice Mill Pond is one of the large ponds that is part of the City's drainage system and is linear in shape. Dredging will re-establish the volume within the pond allowing the pond to again function as a stormwater quantity feature. The removal of the sediment also removes pollutants such as phosphorus and nitrogen, thus increasing the water quality of the pond. Aquatic creatures benefit from the additional volume and quality of the water, and are better able to thrive in the environment.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$848,000				**$848,000**
Funding Source Total:	**-**	**$848,000**	**-**	**-**	**-**	**$848,000**
PROJECT COST:						
Construction		$800,000				**$800,000**
Other		$48,000				**$48,000**
Project Total:	**-**	**$848,000**	**-**	**-**	**-**	**$848,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Dredging of a lake or pond removes the accumulation of sediments which allows the pond to return to its function as a water quantity feature and increases volume to accept additional stormwater runoff. An added benefit to the removal of sediments is the reduction in pollutants, such as phosphorus and nitrogen that attach to the sediment, thus improving the water quality within the pond. Adjacent communities utilize the pond for recreational purposes such as fishing and other types of activities such as kayaking.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Stormwater Pump Station #41 Renovations
DEPARTMENT:	Engineering
CONTACT PERSON:	Mike Moran
PHONE:	9332311
PROJECT LOCATION:	Adjacent to Victory Boulevard at the outfall of Pond #8 of the Kiln Creek Subdivision.

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

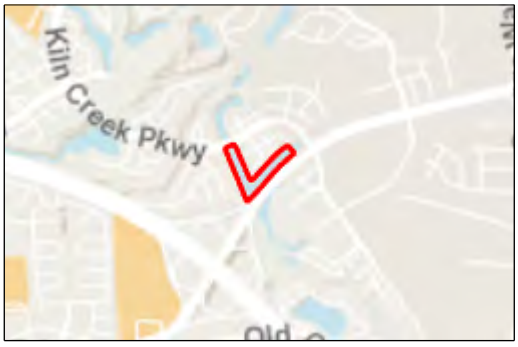
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,532,500
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Due to concerns about the drainage in the Village Green subdivision, the station will be used to reduce the water levels within the Village Green BMP during major storm events that are predicted to pass over the City. The draw-down will allow additional storage capacity within the pond for storm water management. The discharge of the pump station will be determined at a rate not to create erosion and flooding problems downstream of the Village Green subdivision.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)		$132,500		$1,400,000		**$1,532,500**
Funding Source Total:	**-**	**$132,500**	**-**	**$1,400,000**	**-**	**$1,532,500**
PROJECT COST:						
Construction		$125,000		$1,250,000		**$1,375,000**
Other		$7,500		$150,000		**$157,500**
Project Total:	**-**	**$132,500**	**-**	**$1,400,000**	**-**	**$1,532,500**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Due to concerns about the drainage in the Village Green subdivision, the station will be used to reduce the water levels within the Village Green BMP during major storm events that are predicted to pass over the City. The draw-down will allow additional storage capacity within the pond for stormwater management. The discharge of the pump station will be determined at a rate not to create erosion and flooding problems downstream of the Village Green subdivision.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Stream Restoration Projects (TMDL)		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Jamie Clark	**PHONE:**	9332311
PROJECT LOCATION:	Citywide		

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	X

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage		
TOTAL ESTIMATED COST:	$1,109,225	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Due to the age of the City and its stormwater infrastructure that includes natural streams as part of its overall drainage system, erosion of stream channels is becoming an issue for adjacent private property owners, as well as ensuring stormwater runoff is conducted efficiently through the systems. Utilizing the natural waterways within the City will retain the aesthetics of natural surroundings, provide water quality benefit for the City (credit for complying with Total Maximum Daily Loading requirements), and ensure passage of stormwater runoff. Projects range from 200-1500 feet in length of channel stabilization and or restoration. The design typically involves using plunge pools at outfalls, riprap for bank protection or as an energy dissipator, J-hooks and cross-vanes, log and rock sills to serve as grade controls, and the planting of vegetation to help stabilize a channel and its banks.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$265,225	$273,000	$281,000	$290,000	**$1,109,225**
Gen Obligation Bond (GOB)						**-**
Other						**-**
Stormwater Mgmt Fund						**-**
Funding Source Total:	**-**	**$265,225**	**$273,000**	**$281,000**	**$290,000**	**$1,109,225**
PROJECT COST:						
Construction		$250,000	$250,000	$250,000	$250,000	**$1,000,000**
Internal Staff Cost						**-**
Other		$15,225	$23,000	$31,000	$40,000	**$109,225**
Project Total:	**-**	**$265,225**	**$273,000**	**$281,000**	**$290,000**	**$1,109,225**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Projects involving stream stabilization and restoration keep the beauty of a natural environment while still managing stormwater runoff in an effective and safe manner. Naturally draining streams and channels can maintain or become a habitat for wildlife. The erosion of banks is alleviated, thus reducing the concerns of property owners. The life expectancy of the channels will be extended by using current methods of design that reduce the need for channel maintenance. Natural streams also benefit the City by being a water quality feature that reduce the migration of pollutants such as sediment, phosphorus, and nitrogen, and allows the City to take credit for those reductions relative to TMDL requirements.

STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Thalia and Saddler Drives Stream Restoration (TMDL)		
DEPARTMENT:	Engineering		
CONTACT PERSON:	Jamie Clark	**PHONE:**	9332311
PROJECT LOCATION:	Channel between Thalia Drive and Saddler Drive from Coloma Drive to Coleen Drive.		

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage		
TOTAL ESTIMATED COST:	$1,110,000	**NEW PROJECT:**	N

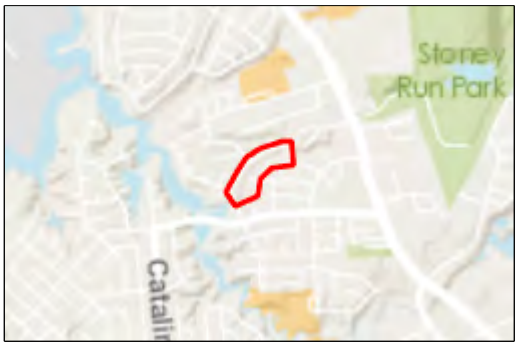
PROJECT DESCRIPTION and/or JUSTIFICATION: The existing drainage channel at the rear of residential properties along Thalia and Saddler Drives from Coloma Drive to Colleen Drive is experiencing erosion and has deteriorated to a point where it is causing flooding of private properties. This channel conducts stormwater runoff from several public rights-of-way such as Warwick Boulevard. The project will include providing a stable and constant cross-section with applicable natural and stone armaments for conducting stormwater runoff from a 10-year storm event. Easements will be required on properties that do not presently have any or if existing ones need to be increased.

The design of an urban stream restoration typically involves using plunge pools at outfalls, riprap for bank protection or as an energy dissipator, J-hooks and cross-vanes, log and rock sills to serve as grade controls, and the planting of vegetation to help stabilize the channel. The City applied for the Department of Environmental Quality (DEQ) Stormwater Local Assistance Fund (SLAF) 50/50 matching funds for this project in FY 2015.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget						**-**
Gen Obligation Bond (GOB)		$555,000				**$555,000**
Grant Funding		$555,000				**$555,000**
Funding Source Total:	**-**	**$1,110,000**	**-**	**-**	**-**	**$1,110,000**
PROJECT COST:						
Construction		$1,000,000				**$1,000,000**
Internal Staff Cost						**-**
Other		$60,000				**$60,000**
Planning/Design						**-**
Site Acquisition		$50,000				**$50,000**
Project Total:	**-**	**$1,110,000**	**-**	**-**	**-**	**$1,110,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project involves stabilization and restoration to keep the beauty of a natural environment while still having the ability to conduct stormwater runoff in an effective and safe manner. The erosion of banks is alleviated, thus reducing the concerns of property owners. The life expectancy of the channels is extended by using current methods of design which reduces the need for channel maintenance. Natural streams also benefit the City by being a water quality feature that reduce the migration of pollutants such as sediment, phosphorus, and nitrogen, and allows the City to take credit for those reductions relative to TMDL requirements.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Upper Newmarket Creek Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Jamie Clark
PHONE:	9332311
PROJECT LOCATION:	Watkins Elementary School property to 270 Benns Road

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,024,500
NEW PROJECT:	N

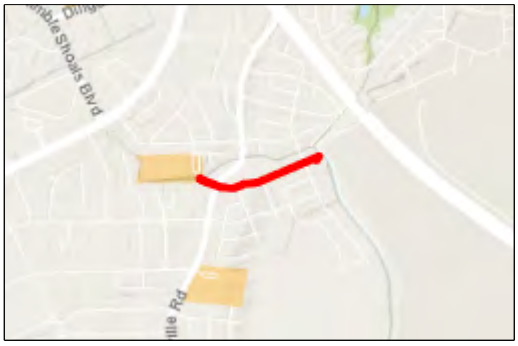
PROJECT DESCRIPTION and/or JUSTIFICATION: Concerns of flooding in adjacent neighborhoods lead to an analysis of the upper portion of the Newmarket Creek watershed. This project will reduce the flooding during the 10-year and 50-year storm events along the upper section of the watershed where the majority of problems have occurred. The project involves constructing two stormwater management facilities. One facility on the Watkins School property and one at 270 Benns Road, which is City owned property.

The project scope also includes the widening of the channel at specific areas to facilitate the movement of stormwater runoff through the channel. The two facilities will provide water quantity control by adding storage area to control the volume of stormwater runoff from the watershed traveling through Newmarket Creek. Widening of the channel will also provide additional volume for stormwater runoff to travel through the channel. Flooding of rights-of-way and private property is reduced during rainfall events of 10-year to 50-year storms. Construction will be phased.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)				$154,500	$870,000	**$1,024,500**
Funding Source Total:	**-**	**-**	**-**	**$154,500**	**$870,000**	**$1,024,500**
PROJECT COST:						
Construction				$137,500	$750,000	**$887,500**
Other				$17,000	$120,000	**$137,000**
Project Total:	**-**	**-**	**-**	**$154,500**	**$870,000**	**$1,024,500**

IMPACT ON OPERATING BUDGET: Maintenance of the channel will be reduced as a result of the type of vegetation and stone armament.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The improvements to the channel and the addition of stormwater facilities will benefit the community by providing better flow and storage of stormwater runoff in the watershed. Localized flooding of rights-of-way and private property will be reduced for storms ranging from 10-year to 50-year events. Approximately 2,100 single family homes and 15 apartment complexes averaging 100 units are within the watershed that are affected by the drainage systems that discharge to Newmarket Creek.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Warwick Boulevard and Bland Boulevard Intersection Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Cathleen Saunders
PHONE:	926-3530
PROJECT LOCATION:	Intersection of Warwick Boulevard and Bland Boulevard

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	X
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	
Mandated/Legal Requirement	

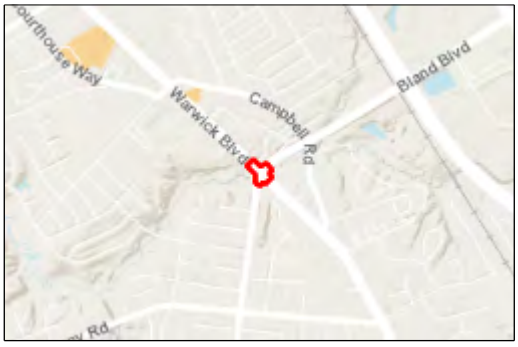
PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$1,300,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The Warwick Boulevard corridor is one of the City's primary evacuation routes. This intersection routinely experience flooding that prevents passage during emergencies. These improvements will elevate the roadway and minimize potential flooding.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$650,000					**$650,000**
Grant Funding	$650,000					**$650,000**
Funding Source Total:	**$1,300,000**	**-**	**-**	**-**	**-**	**$1,300,000**
PROJECT COST:						
Construction	$1,300,000					**$1,300,000**
Project Total:	**$1,300,000**	**-**	**-**	**-**	**-**	**$1,300,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The Warwick Boulevard corridor is one of the City's primary evacuation routes. This intersection routinely experiences flooding that prevents passage during emergencies. These improvements will elevate the roadway and minimize potential flooding. Approximately, 2,000 LF of roadway will be raised out of the floodway.



STORMWATER DRAINAGE CAPITAL PROJECT

PROJECT NAME:	Warwick Boulevard at Rivermont Drainage Improvements
DEPARTMENT:	Engineering
CONTACT PERSON:	Cathleen Saunders
PHONE:	9332311
PROJECT LOCATION:	Hilton Village and Rivermont areas of the City; Warwick Blvd. to James River, Main St. to Government Ditch

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Stormwater Drainage
TOTAL ESTIMATED COST:	$3,648,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The existing storm sewer system in this area is undersized and failing. Businesses along the corridor have advised of flooding issues backing up on their property. In addition, flooding at the Main Street underpass during significant rainstorm events remains an issue. A recent analysis of the existing system indicates inadequacy due to cave-ins and inability to handle runoff from a 10-year storm. Upon further design and analysis of the drainage systems in the area, it was decided to expand the project and divide it into 3 phases:

Phase I, which began in FY 2015, included design and construction of a new trunk storm sewer along the right-of-way for Warwick Boulevard from Hopkins Street to the Government ditch. The new drainage system will allow for additional upgrades to the upstream area of the drainage area. This phase will reduce flooding along the roadway and at intersections of side streets with Warwick Boulevard.

Phase II includes design and construction of a new trunk main storm sewer in Main Street from Ferguson Avenue to an outfall into the James River next to Hilton Elementary School. The existing pipe is failing and is located under a structure at Saint Andrew's School which is causing a potential safety issue. This phase will reroute the City's existing storm drainage system from under the building and increase the outfall at Hilton Elementary to allow for upgrades to the system upstream of the trunk main.

Phase III involves the design and construction that will upgrade the system along Main Street and reroute the force main from the pump station located at the Main Street Underpass. The new system will discharge to the constructed drainage system for Phase 2.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Gen Obligation Bond (GOB)	$2,163,000	$1,485,000				**$3,648,000**
Funding Source Total:	**$2,163,000**	**$1,485,000**	**-**	**-**	**-**	**$3,648,000**
PROJECT COST:						
Construction	$2,100,000	$1,400,000				**$3,500,000**
Internal Staff Cost						**-**
Other	$63,000	$85,000				**$148,000**
Project Total:	**$2,163,000**	**$1,485,000**	**-**	**-**	**-**	**$3,648,000**

IMPACT ON OPERATING BUDGET: The proposed improvements will extend the life expectancy of the drainage system by 50 years, thus reducing the time and effort required for maintenance and decreasing the need for funding for frequent repairs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The benefits of the three phases of the project are the reduction in risk of flooding and associated damage due to flooding to businesses along Warwick Boulevard and Saint Andrews School, new drainage systems that are designed to present Stormwater Management Standards, and keeping the Main Street underpass passable for storm events of 10-years or less.

Approximately 180 homes and businesses and nearly 5,400 LF of roadway will benefit from the installation of the stormwater drainage systems. This underpass is used by an average of 11,919 vehicles daily based on 2013 data. The risk to public health and vehicles is reduced by the installation of a new drainage system and an upgrade to the stormwater pump station. Warwick Boulevard is a major thoroughfare through the City used by many people to travel from one side of the City to the other. Reducing the risk of flooding and roadway closures benefits the citizens by allowing them to utilize the roadway as a means for evacuations.

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WATERWORKS

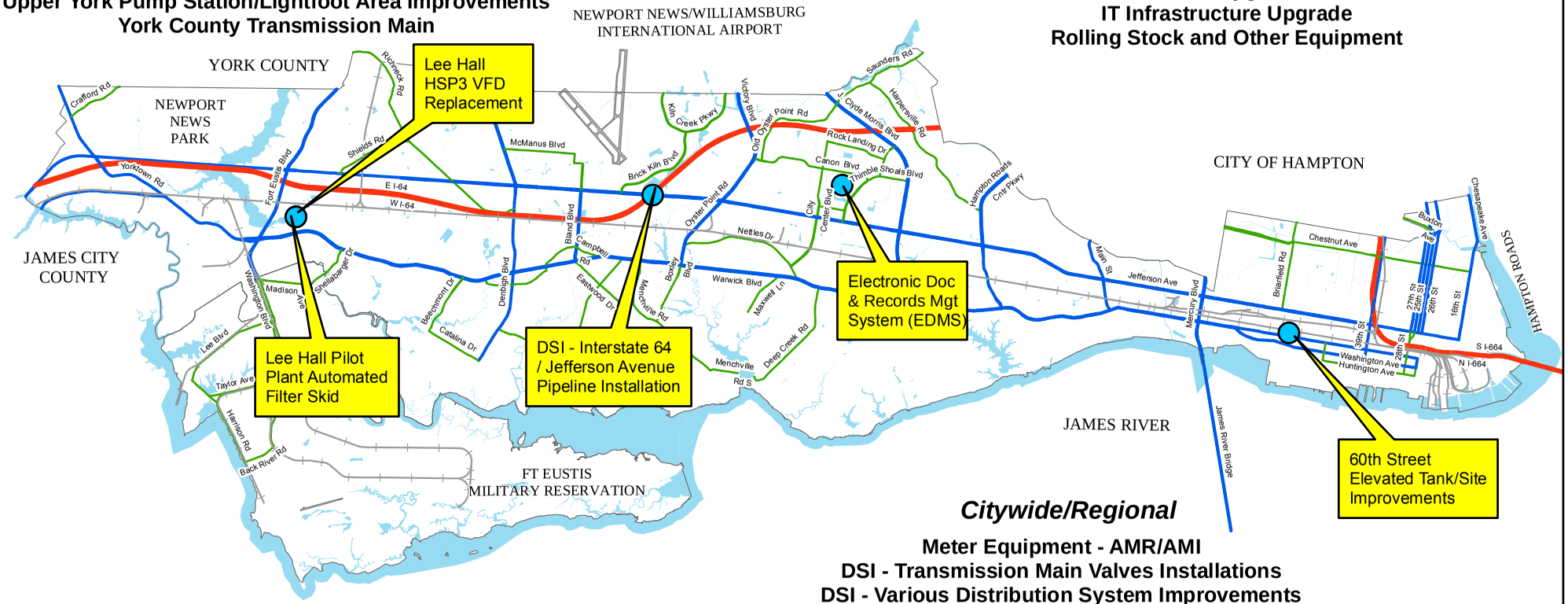
City of Newport News
Capital Improvements Plan FY2017 - FY2021
Waterworks

York County

Harwood's Mill Filter Addition
Harwood's Mill Dam Improvements
Upper York Pump Station/Lightfoot Area Improvements
York County Transmission Main

Citywide/Regional

Asset Reclamation Projects
PLC-5 Upgrade
IT Infrastructure Upgrade
Rolling Stock and Other Equipment



Citywide/Regional

Meter Equipment - AMR/AMI
DSI - Transmission Main Valves Installations
DSI - Various Distribution System Improvements
Little Creek Pump Station Improvements
Supervisory Control & Data Acquisition (SCADA) System
Treated Water Tank Rehabilitations
Water Treatment Plant Facility Engineering and Improvements
Watershed Protection Improvements
Cathodic Inspection/Rehab Pipelines
Effective Utility Managment IT
Plant Asset Renewal
Source Water Pipeline Inspection/Rehabilitation

Legend

Waterworks

New Kent County

Chickahominy Site Improvements

Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Asset Management Project (AMP)	$185,000	$0	$0	$0	$0	**$185,000**
Asset Reclamation Projects	$0	$0	$3,850,000	$0	$0	**$3,850,000**
DSI - Interstate 64 / Jefferson Avenue Pipeline Installation	$0	$300,000	$600,000	$0	$0	**$900,000**
DSI - Transmission Main Valves Installations	$250,000	$250,000	$0	$0	$0	**$500,000**
DSI - Various Distribution System Improvements	$1,250,000	$1,400,000	$1,500,000	$1,500,000	$1,500,000	**$7,150,000**
Electronic Document and Records Management System (EDMS)	$0	$0	$0	$500,000	$0	**$500,000**
Fox Hill Water Main/Tank Demolition	$1,500,000	$0	$0	$0	$0	**$1,500,000**
Harwood's Mill Filter Addition	$0	$0	$0	$4,000,000	$2,000,000	**$6,000,000**
IT Infrastructure Upgrade	$175,000	$100,000	$100,000	$100,000	$100,000	**$575,000**
Lightfoot Well 3 DEQ Permit Requirements	$50,000	$0	$0	$0	$0	**$50,000**
Little Creek Pump Station Improvements	$0	$0	$0	$1,000,000	$0	**$1,000,000**
PLC-5 Upgrade	$300,000	$600,000	$600,000	$0	$0	**$1,500,000**
Rolling Stock and Other Equipment	$1,700,000	$2,200,000	$1,800,000	$1,800,000	$1,800,000	**$9,300,000**
Supervisory Control & Data Acquisition (SCADA) System	$0	$0	$500,000	$500,000	$0	**$1,000,000**
Treated Water Tank Maintenance	$100,000	$0	$600,000	$0	$0	**$700,000**
Water Treatment Plant Facility Engineering and Improvements	$350,000	$350,000	$350,000	$350,000	$350,000	**$1,750,000**
Watershed Protection Improvements	$75,000	$500,000	$0	$0	$0	**$575,000**
*Cathodic Inspection/Rehab Pipelines	$80,000	$80,000	$80,000	$80,000	$80,000	**$400,000**
*E-billing Project	$100,000	$0	$0	$0	$0	**$100,000**
*Effective Utility Management IT Implementation	$500,000	$500,000	$0	$0	$0	**$1,000,000**
*Harwood's Mill Spillway Improvements	$500,000	$0	$0	$0	$0	**$500,000**
*Plant Asset Renewal	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
*Source Water Pipeline Inspection/Rehabilitation	$1,500,000	$100,000	$100,000	$100,000	$100,000	**$1,900,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$8,815,000**	**$6,580,000**	**$10,280,000**	**$10,130,000**	**$6,130,000**	**$41,935,000**
REVENUE BONDS						
60th Street Elevated Tank/Site Improvements	$3,000,000	$0	$0	$0	$0	**$3,000,000**
Chickahominy Site Improvements	$0	$1,400,000	$0	$0	$0	**$1,400,000**
Lee Hall Manganese Treatment/Disposal	$240,000	$3,000,000	$1,400,000	$0	$0	**$4,640,000**
Lee Hall Reservoir Improvements	$8,400,000	$2,700,000	$0	$0	$0	**$11,100,000**
Upper York Pump Station / Lightfoot Area Improvements	$0	$2,500,000	$1,700,000	$0	$0	**$4,200,000**
York County Transmission Main	$2,400,000	$0	$0	$0	$0	**$2,400,000**
*Meter Equipment - AMR/AMI	$3,000,000	$3,000,000	$3,000,000	$0	$0	**$9,000,000**
TOTAL REVENUE BONDS:	**$17,040,000**	**$12,600,000**	**$6,100,000**	**$0**	**$0**	**$35,740,000**
WATERWORKS TOTAL:	***$25,855,000***	***$19,180,000***	***$16,380,000***	***$10,130,000***	***$6,130,000***	***$77,675,000***

Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	5 Year Total
** New Project*						
CASH CAPITAL - OPERATING BUDGET						
Cathodic Inspection/Rehab Pipelines	$80,000	$80,000	$80,000	$80,000	$80,000	**$400,000**
Chickahominy Site Improvements	$0	$0	$0	$1,400,000	$0	**$1,400,000**
DSI - Transmission Main Valves Installations	$250,000	$0	$0	$0	$0	**$250,000**
DSI - Various Distribution System Improvements	$1,400,000	$1,500,000	$1,500,000	$3,000,000	$3,000,000	**$10,400,000**
Effective Utility Management IT Implementation	$500,000	$200,000	$0	$0	$0	**$700,000**
Electronic Document and Records Management System (EDMS)	$0	$0	$0	$500,000	$0	**$500,000**
IT Infrastructure Upgrade	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
Little Creek Pump Station Improvements	$0	$0	$1,000,000	$0	$0	**$1,000,000**
Plant Asset Renewal	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
PLC-5 Upgrade	$300,000	$300,000	$600,000	$600,000	$0	**$1,800,000**
Rolling Stock and Other Equipment	$1,500,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000	**$8,700,000**
Source Water Pipeline Inspection/Rehabilitation	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
Supervisory Control & Data Acquisition (SCADA) System	$500,000	$500,000	$0	$0	$0	**$1,000,000**
Treated Water Tank Maintenance	$0	$800,000	$0	$0	$0	**$800,000**
Water Treatment Plant Facility Engineering and Improvements	$350,000	$350,000	$350,000	$350,000	$350,000	**$1,750,000**
Watershed Protection Improvements	$0	$500,000	$0	$0	$0	**$500,000**
*Lee Hall HSP3 VFD Replacement	$160,000	$0	$0	$0	$0	**$160,000**
*Lee Hall Pilot Plant Automated Filter Skid	$200,000	$0	$0	$0	$0	**$200,000**
TOTAL CASH CAPITAL - OPERATING BUDGET:	**$5,740,000**	**$6,530,000**	**$5,830,000**	**$8,230,000**	**$5,730,000**	**$32,060,000**
REVENUE BONDS						
60th Street Elevated Tank/Site Improvements	$0	$2,000,000	$0	$0	$0	**$2,000,000**
Asset Reclamation Projects	$0	$3,850,000	$0	$0	$0	**$3,850,000**
DSI - Interstate 64 / Jefferson Avenue Pipeline Installation	$300,000	$600,000	$0	$0	$0	**$900,000**
Harwood's Mill Dam Improvements	$600,000	$0	$0	$0	$0	**$600,000**
Harwood's Mill Filter Addition	$0	$0	$4,000,000	$2,000,000	$0	**$6,000,000**
Meter Equipment - AMR/AMI	$30,000,000	$0	$0	$0	$0	**$30,000,000**
Upper York Pump Station / Lightfoot Area Improvements	$0	$2,500,000	$1,700,000	$0	$0	**$4,200,000**
York County Transmission Main	$3,300,000	$0	$0	$0	$0	**$3,300,000**
TOTAL REVENUE BONDS:	**$34,200,000**	**$8,950,000**	**$5,700,000**	**$2,000,000**	**$0**	**$50,850,000**
WATERWORKS TOTAL:	***$39,940,000***	***$15,480,000***	***$11,530,000***	***$10,230,000***	***$5,730,000***	***$82,910,000***

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	60th Street Elevated Tank/Site Improvements
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	

DISTRICT:		
	SOUTH	X
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$2,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The 60th Street elevated tank was constructed in 1934. Since that time, overall system pressures have dropped by approximately 5 psi. This has rendered the bottom of the tank 12 feet higher than ideal. Further, the dimensions of the tank are such that less water is held in reserve for emergencies. Given the age of the tank and the fact that the overall dimensions are no longer appropriate for system operation, replacement is more appropriate than rehabilitation..

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Revenue Bonds		$2,000,000				**$2,000,000**
Funding Source Total:	**-**	**$2,000,000**	**-**	**-**	**-**	**$2,000,000**
PROJECT COST:						
Construction		$2,000,000				**$2,000,000**
Project Total:	**-**	**$2,000,000**	**-**	**-**	**-**	**$2,000,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Asset Reclamation Projects
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$3,850,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will demolish buildings and infrastructures of Waterworks Jefferson Avenue Pump Station, Harwood's Mill Plant No. 3, and previous Lee Hall Plant due to completion of a new water treatment plant and system changes. Buildings, basins and underground infrastructure from the previously used Lee Hall plant need to be removed and the area need to be made presentable as soon as possible. The Jefferson Avenue Pump Station will also be demolished due to obsolescence due to system improvements along with remaining remnants of the old Harwood's Mill Plant #3.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Revenue Bonds		$3,850,000				**$3,850,000**
Funding Source Total:	**-**	**$3,850,000**	**-**	**-**	**-**	**$3,850,000**
PROJECT COST:						
Construction		$3,500,000				**$3,500,000**
Planning/Design		$350,000				**$350,000**
Project Total:	**-**	**$3,850,000**	**-**	**-**	**-**	**$3,850,000**

IMPACT ON OPERATING BUDGET: The project will reduce maintenance costs of sites.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Asset reclamation will reduce maintenance costs and eliminate safety hazards at existing Waterworks locations including Lee Hall WTP, Harwood's Mill WTP, and Jefferson Avenue Pump Station.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Cathodic Inspection/Rehab Pipelines
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$400,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will test the existing cathodic protection systems that have been installed on existing waterlines. From the evaluation of the reports on the findings, measures can be taken to protect the pipelines from any active corrosion.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$80,000	$80,000	$80,000	$80,000	$80,000	**$400,000**
Funding Source Total:	**$80,000**	**$80,000**	**$80,000**	**$80,000**	**$80,000**	**$400,000**
PROJECT COST:						
Other	$80,000	$80,000	$80,000	$80,000	$80,000	**$400,000**
Project Total:	**$80,000**	**$80,000**	**$80,000**	**$80,000**	**$80,000**	**$400,000**

IMPACT ON OPERATING BUDGET: The project will reduce maintenance costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demands at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Chickahominy Site Improvements
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Supply / New Kent County

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$1,400,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The lower Chickahominy River is a major source of drinking water for the lower portion of the Virginia Peninsula, representing approximately 60% of the raw water supply. This site is currently used for source water sampling and monitoring of the supply sources in this part of the system. This project would construct a new source water operations center, add a boat ramp and pier for lake access, establish asphalt access drives and parking areas, add lighting to enhance site security, and increase the existing boat house length.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget				$1,400,000		**$1,400,000**
Funding Source Total:	**-**	**-**	**-**	**$1,400,000**	**-**	**$1,400,000**
PROJECT COST:						
Construction				$1,200,000		**$1,200,000**
Planning/Design				$200,000		**$200,000**
Project Total:	**-**	**-**	**-**	**$1,400,000**	**-**	**$1,400,000**

IMPACT ON OPERATING BUDGET: Cleanup of facilities will reduce overall maintenance cost and allow for more efficient operations by field crews.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	DSI - Interstate 64 / Jefferson Avenue Pipeline Installation
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	City of Newport News

DISTRICT:		
	SOUTH	
	CENTRAL	X
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$900,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will install approximately 1,800 feet of 16-inch treated water pipeline crossing I-64 at Jefferson Avenue. This pipeline forms part of the transmission network of the distribution system. The importance of this pipeline will increase as planned abandonments along the railroad occur..

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Revenue Bonds	$300,000	$600,000				**$900,000**
Funding Source Total:	**$300,000**	**$600,000**	**-**	**-**	**-**	**$900,000**
PROJECT COST:						
Construction	$200,000	$600,000				**$800,000**
Planning/Design	$100,000					**$100,000**
Project Total:	**$300,000**	**$600,000**	**-**	**-**	**-**	**$900,000**

IMPACT ON OPERATING BUDGET: The project will reduce maintenance costs on current aging pipeline.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	DSI - Transmission Main Valves Installations
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$250,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The installation of several large diameter transmission valves throughout the distribution system. As development grows throughout the distribution system, there are increasing numbers of distribution taps off of transmission mains. As a result, additional large diameter transmission valves are needed throughout the system to minimize the number of customer service disruptions during maintenance or emergency situations.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$250,000					**$250,000**
Funding Source Total:	**$250,000**	**-**	**-**	**-**	**-**	**$250,000**
PROJECT COST:						
Construction	$250,000					**$250,000**
Project Total:	**$250,000**	**-**	**-**	**-**	**-**	**$250,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	DSI - Various Distribution System Improvements
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$10,400,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Distribution System Improvements (DSI) is an ongoing program to replace water distribution infrastructure at the end of its useful life. Water distribution infrastructure includes water distribution pipelines, fire hydrants, services, valves, and other associated appurtenances. This program uses an evaluation system that prioritizes Waterworks DSI replacement projects. For example, a high priority project is the periodic removal of all Galvanized Iron Pipe (GIP) within the water distribution system. GIP corrodes over time which causes leaks, discolored water, and low pressure.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$1,400,000	$1,500,000	$1,500,000	$3,000,000	$3,000,000	**$10,400,000**
Funding Source Total:	**$1,400,000**	**$1,500,000**	**$1,500,000**	**$3,000,000**	**$3,000,000**	**$10,400,000**
PROJECT COST:						
Construction	$1,400,000	$1,500,000	$1,500,000	$3,000,000	$3,000,000	**$10,400,000**
Project Total:	**$1,400,000**	**$1,500,000**	**$1,500,000**	**$3,000,000**	**$3,000,000**	**$10,400,000**

IMPACT ON OPERATING BUDGET: Waterworks maintains a relatively consistent portion of cash capital spending for DSI purposes to minimize any negative budgetary effect associated with emergency repair..

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Effective Utility Management IT Implementation
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	X
Environmental Sustainability	X
Community Renewal & Maint	X
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	X

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$700,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will involve the IT systems, dashboard analytics, advanced operations management systems and other integrative technologies that will be needed to help the utilities reap the full benefits of its Effective Utilities Management (EUM) program. As background information, the EUM program will enable the water utility to address its overall performance goals associated with its vision of becoming a model water utility in the country. The anticipated project will help the water utility better benefit from the cumulative effects of achieving its various EUM goals related to financial viability, product quality, customer service, infrastructure stability, systems optimization, risk management, future water supply efforts, community sustainability and others..

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$500,000	$200,000				**$700,000**
Funding Source Total:	**$500,000**	**$200,000**	**-**	**-**	**-**	**$700,000**
PROJECT COST:						
Other	$500,000	$200,000				**$700,000**
Project Total:	**$500,000**	**$200,000**	**-**	**-**	**-**	**$700,000**

IMPACT ON OPERATING BUDGET: By enhancing decision making through automation, consolidation, and integrating operating data and information across the Department, the project will reduce operating cost on the long-term basis.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Electronic Document and Records Management System (EDMS)		
DEPARTMENT:	Waterworks		
CONTACT PERSON:	Steve Carpenter	**PHONE:**	757-926-1090
PROJECT LOCATION:	Waterworks Administrative Offices, City Center at Oyster Point		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	
	NORTH			Community Renewal & Maint	
	CITYWIDE			Fiscal Mgt & Efficient Ops	**X**
				Max Emphasis Public Safety	
PROJECT CATEGORY:	Waterworks			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$500,000	**NEW PROJECT:**	N

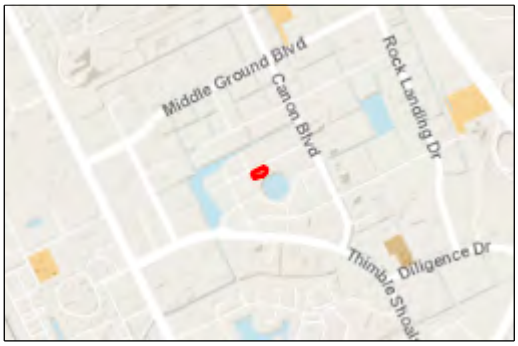
PROJECT DESCRIPTION and/or JUSTIFICATION: Develop, configure and implement Electronic Document and Records Management capabilities of Microsoft Sharepoint 2010 software for management of electronic format records including drawings and documents in a common electronic repository with additional ability to perform records management tasks such as records destruction scheduling based on retention schedule, metadata association with documents and records, ability to interact with GIS, and ability to interact with AutoCAD. Purchase separate software or add-on software for Sharepoint to manage email as documents and records.

Establish central, manageable, repository for electronic records (scanned images, record photos, e-forms, and electronically created documents) to enable department-wide access to indexes and records.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget				$500,000		**$500,000**
Funding Source Total:	**-**	**-**	**-**	**$500,000**	**-**	**$500,000**
PROJECT COST:						
Other				$500,000		**$500,000**
Project Total:	**-**	**-**	**-**	**$500,000**	**-**	**$500,000**

IMPACT ON OPERATING BUDGET: Ongoing annual costs for software/hardware maintenance and periodic software upgrades as required.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.



WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Harwood's Mill Dam Improvements
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Harwood's Mill Facilities

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$600,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Upgrades to the primary and emergency spillways are required by the Virginia Department of Conservation and Recreation who issue operating permits for regulated dams in the Commonwealth. The upgrades will ensure compliance with the City's operating permit, enhance reliability for the dam, and provide increased flexibility to deal with increasingly uncertain climate conditions.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Revenue Bonds	$600,000					**$600,000**
Funding Source Total:	**$600,000**	**-**	**-**	**-**	**-**	**$600,000**
PROJECT COST:						
Construction	$600,000					**$600,000**
Project Total:	**$600,000**	**-**	**-**	**-**	**-**	**$600,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

Waterworks will maintain the public health of the community by being in 100% compliance of all drinking water regulations and less than .05% of customers call pertaining to water quality.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Harwood's Mill Filter Addition
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Harwood's Mill Facilities

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	**X**
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$6,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will install a new raw water pump, two new filters, a filter media replacement and underdrain repairs.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Revenue Bonds			$4,000,000	$2,000,000		**$6,000,000**
Funding Source Total:	**-**	**-**	**$4,000,000**	**$2,000,000**	**-**	**$6,000,000**
PROJECT COST:						
Other			$4,000,000	$2,000,000		**$6,000,000**
Project Total:	**-**	**-**	**$4,000,000**	**$2,000,000**	**-**	**$6,000,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	IT Infrastructure Upgrade
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Lee Hall MOC Building Computer Systems

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	**X**
Max Emphasis Public Safety	
Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$1,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The current switch at the Lee Hall MOC has reached the end of the support cycle from CISCO. Replacement of the switch will decrease the number of routing protocols within the environment now reducing the utilization. With the switch being out of warranty, its failure could take down the entire LHMOC site. The current switch at Station 8 requires replacement due to memory utilization because additional memory cannot be added to the switch. Station 8 switch is using 48% of memory which indicates a potential issue. Lee Hall MOC, Harwood's Mill, Oyster Point Town Center and the Lee Hall Plant need to have a gigabit ethernet added to the desktop to improve application performance. The project will downsize the number of servers from 42 to 15 by moving to a VM Ware environment. This will improve performance and increase bandwidth to handle new technologies (i.e. video conferencing, security camera, etc.).

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
Funding Source Total:	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$1,000,000**
PROJECT COST:						
Other	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
Project Total:	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$1,000,000**

IMPACT ON OPERATING BUDGET: The project will reduced maintenance costs for repairing aging equipment.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Lee Hall HSP3 VFD Replacement
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	926-1090
PROJECT LOCATION:	

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$160,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: Lee Hall high service pump 3 variable frequency drive (VFD) is nearing the end of its useful life and is in need of replacement. This project will include furnishing all labor, materials, equipment and incidentals necessary to supply a VFD, accessories, and field services to be compatible with the existing high service pump 3, motor, and input transformer.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$160,000					**$160,000**
Funding Source Total:	**$160,000**	**-**	**-**	**-**	**-**	**$160,000**
PROJECT COST:						
Construction	$160,000					**$160,000**
Project Total:	**$160,000**	**-**	**-**	**-**	**-**	**$160,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Lee Hall Pilot Plant Automated Filter Skid
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	926-1090
PROJECT LOCATION:	

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$200,000
NEW PROJECT:	Y

PROJECT DESCRIPTION and/or JUSTIFICATION: The current Lee Hall Pilot Plant is used to test various water treatment process changes prior to implementation within the full-scale plant. This project includes the procurement of an automated filter skid to replace the current manually operated pilot plant filters which are nearing the end of their useful life.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$200,000					**$200,000**
Funding Source Total:	**$200,000**	**-**	**-**	**-**	**-**	**$200,000**
PROJECT COST:						
Construction	$200,000					**$200,000**
Project Total:	**$200,000**	**-**	**-**	**-**	**-**	**$200,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Little Creek Pump Station Improvements
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	James City County

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	**X**
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$1,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace the obsolete pumps, valves and electrical gear.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget			$1,000,000			**$1,000,000**
Funding Source Total:	**-**	**-**	**$1,000,000**	**-**	**-**	**$1,000,000**
PROJECT COST:						
Construction			$1,000,000			**$1,000,000**
Project Total:	**-**	**-**	**$1,000,000**	**-**	**-**	**$1,000,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Meter Equipment - AMR/AMI		
DEPARTMENT:	Waterworks		
CONTACT PERSON:	Steve Carpenter	**PHONE:**	757-926-1090
PROJECT LOCATION:	Various		

DISTRICT:			**PRIORITIES:**		
	SOUTH			Economic Dev & Redev	
	CENTRAL			Environmental Sustainability	X
	NORTH			Community Renewal & Maint	
	CITYWIDE			Fiscal Mgt & Efficient Ops	X
				Max Emphasis Public Safety	
PROJECT CATEGORY:	Waterworks			Mandated/Legal Requirement	

TOTAL ESTIMATED COST:	$30,000,000	**NEW PROJECT:**	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will implement a hybrid meter system that may include Automated Meter Reading (AMR) and Advance Metering Infrastructure (AMI). Our current system of approximately 126,000 meters is almost exclusively all manually read and is labor intensive. AMR would allow meters to be read in close proximity to a collector (i.e. a moving car) while AMI meters will send the reading directly to a location (i.e. Customer Service Center). Further, AMI will allow for greater capabilities such as water turn on/off capabilities from the end user's desk. The driving factors for this project are safety of our employees, workforce retention, meter reading efficiency, monthly billing and enhanced customer service (customer high-usage notifications).

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Revenue Bonds	$30,000,000					**$30,000,000**
Funding Source Total:	**$30,000,000**	**-**	**-**	**-**	**-**	**$30,000,000**
PROJECT COST:						
Other	$30,000,000					**$30,000,000**
Project Total:	**$30,000,000**	**-**	**-**	**-**	**-**	**$30,000,000**

IMPACT ON OPERATING BUDGET: The ongoing annual costs for software maintenance and the need to make periodic software upgrades will impact the operating budget.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: The project will allow Waterworks to enhance its customer service by capturing additional meter readings and storing the data that documents the consumption of water use. This data can be used to substantiate water use for disputed water bills, notify a customer in advance that they may be experiencing a water leak, and notify Waterworks of potential backflow situations. It will also help reduce the risk of personal injury by eliminating having to read meters in unsafe locations and in unsafe conditions. It will drastically reduce route read times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Plant Asset Renewal
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	**X**
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$1,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will replace assets that have reached the end of their useful life. Replacing assets in a systematic manner at the end of their life is more cost effective and safer than running the unit(s) to failure.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
Funding Source Total:	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$1,000,000**
PROJECT COST:						
Construction	$160,000	$160,000	$160,000	$160,000	$160,000	**$800,000**
Other	$20,000	$20,000	$20,000	$20,000	$20,000	**$100,000**
Planning/Design	$20,000	$20,000	$20,000	$20,000	$20,000	**$100,000**
Project Total:	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$1,000,000**

IMPACT ON OPERATING BUDGET: The project will reduced maintenance costs.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	PLC-5 Upgrade
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Regional Coverage Systemwide

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$1,800,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The current PLC-5 system has been in existence for 30 years. The vendor has informed us that they are obsoleting the hardware during the next 5 years requiring upgrade of the PLC-5 systems at Harwood's Mill and Lee Hall.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$300,000	$300,000	$600,000	$600,000		**$1,800,000**
Funding Source Total:	**$300,000**	**$300,000**	**$600,000**	**$600,000**	**-**	**$1,800,000**
PROJECT COST:						
Other	$300,000	$300,000	$600,000	$600,000		**$1,800,000**
Project Total:	**$300,000**	**$300,000**	**$600,000**	**$600,000**	**-**	**$1,800,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Rolling Stock and Other Equipment
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	City of Newport News - Lee Hall Operations and Maintenance Center

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:	
Economic Dev & Redev	
Environmental Sustainability	X
Community Renewal & Maint	
Fiscal Mgt & Efficient Ops	X
Max Emphasis Public Safety	X
Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$8,700,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Annual Cash Capital expenditures for the capital assets identified below to support ongoing effective and efficient operations.

- Rolling Stock (trucks, automobiles, special equipment, etc.)
- Radio/Communication Equipment
- Capital Equipment and Tools
- Information Technology Equipment
- Laboratory Equipment

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$1,500,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000	**$8,700,000**
Funding Source Total:	**$1,500,000**	**$1,800,000**	**$1,800,000**	**$1,800,000**	**$1,800,000**	**$8,700,000**
PROJECT COST:						
Other	$1,500,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000	**$8,700,000**
Project Total:	**$1,500,000**	**$1,800,000**	**$1,800,000**	**$1,800,000**	**$1,800,000**	**$8,700,000**

IMPACT ON OPERATING BUDGET: Lower maintenance costs

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: By developing and implementing a rolling stock replacement plan, Waterworks ensures that its aging fleet is properly suited to provide an adequate and quick response to our customers' needs. Our newer vehicles and heavy equipment burn cleaner fuel, consume less energy, and incorporate hybrid technology where applicable while reducing our carbon footprint and making Newport News a "greener" environment. We are also investing in more back-up alarms, rear view camera technology, and back-up sensors to ensure not only the safety of our employees but the citizens we serve. By being proactive and managing our fleet assets properly, we also reduce repair costs and receive a fair return on investment at the time of sale.

In addition, newer equipment often leads to faster response and completion times, less down time due to repairs, and allows our current work force to accomplish more in-house projects versus hiring outside contractors. By making sure we are equipped with the proper vehicles and equipment, our customers' perspectives should not have to waiver and expect nothing less than an acceptable outcome.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Source Water Pipeline Inspection/Rehabilitation
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will inspect all exposed source water pipe locations on a scheduled interval. The conditions of the waterlines will be verified during these inspections and rehabilitation will be done to extend the service life of the pipelines.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
Revenue Bonds						**-**
Funding Source Total:	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$500,000**
PROJECT COST:						
Construction						**-**
Other	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
Project Total:	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$100,000**	**$500,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Supervisory Control & Data Acquisition (SCADA) System
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	X
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$1,000,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The existing SCADA system was installed in late 1990s. An upgrade of the system to allow better real time data collection, analysis, etc. is required. The SCADA system is used to automate operations and control plants, distribution system pump stations, tanks, etc. and its reliability and ease of use is essential to Waterworks.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$500,000	$500,000				**$1,000,000**
Funding Source Total:	**$500,000**	**$500,000**	**-**	**-**	**-**	**$1,000,000**
PROJECT COST:						
Construction	$500,000	$500,000				**$1,000,000**
Project Total:	**$500,000**	**$500,000**	**-**	**-**	**-**	**$1,000,000**

IMPACT ON OPERATING BUDGET: The upgrade will reduce maintenance costs on aging equipment.

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

Waterworks will maintain the public health of the community by being in 100% compliance of all drinking water regulations and less than .05% of customers call pertaining to water quality.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Treated Water Tank Maintenance
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$800,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will inspect, evaluate and rehabilitate all water distribution storage tanks in the system as needed based on coating service life. This will be an ongoing project with tank(s) scheduled each year based on budget and condition of the coating system.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$800,000				**$800,000**
Funding Source Total:	**-**	**$800,000**	**-**	**-**	**-**	**$800,000**
PROJECT COST:						
Construction		$750,000				**$750,000**
Other						**-**
Planning/Design		$50,000				**$50,000**
Project Total:	**-**	**$800,000**	**-**	**-**	**-**	**$800,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

Waterworks will maintain the public health of the community by being in 100% compliance of all drinking water regulations and less than .05% of customers call pertaining to water quality.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Upper York Pump Station / Lightfoot Area Improvements
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	York County

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$4,200,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: Waterworks acquired the Lightfoot Well System from York County in 2008. As demand grows in that system, the capacity of the well system will be exceeded and water service will be provided from the Northern Zone distribution system. In addition to serving Lightfoot, service will also be provided to James City Service Authority near Route 199 in Lightfoot.

Improvements to the Upper York Pump Station or a new station to serve the Lightfoot Service Area will be required prior to providing service to the area from the Northern Zone treated water system. An additional storage tank is also envisioned in the Lightfoot Area for fire protection. Pipeline improvements along Hubbard's Lane may also be required dependent upon initiation of water purchases by Williamsburg/JCSA per agreement (assumed in 2015).

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Revenue Bonds		$2,500,000	$1,700,000			**$4,200,000**
Funding Source Total:	**-**	**$2,500,000**	**$1,700,000**	**-**	**-**	**$4,200,000**
PROJECT COST:						
Construction		$1,800,000	$1,400,000			**$3,200,000**
Contingency		$200,000	$100,000			**$300,000**
Planning/Design		$500,000	$200,000			**$700,000**
Project Total:	**-**	**$2,500,000**	**$1,700,000**	**-**	**-**	**$4,200,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

Waterworks will maintain the public health of the community by being in 100% compliance of all drinking water regulations and less than .05% of customers call pertaining to water quality.

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Water Treatment Plant Facility Engineering and Improvements
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	X
	Max Emphasis Public Safety	X
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$1,750,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project provides funding for engineering service contracts used for dam safety inspections, treated water tank inspections and evaluations, and general engineering projects performed by outside consultants. Construction cost account for identified projects required to rehabilitate or improve existing plants, pump stations, and minor dam improvements.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget	$350,000	$350,000	$350,000	$350,000	$350,000	**$1,750,000**
Funding Source Total:	**$350,000**	**$350,000**	**$350,000**	**$350,000**	**$350,000**	**$1,750,000**
PROJECT COST:						
Construction	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,000,000**
Planning/Design	$150,000	$150,000	$150,000	$150,000	$150,000	**$750,000**
Project Total:	**$350,000**	**$350,000**	**$350,000**	**$350,000**	**$350,000**	**$1,750,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

Waterworks will maintain the public health of the community by being in 100% compliance of all drinking water regulations and less than .05% of customers call pertaining to water quality

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	Watershed Protection Improvements
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	Various Regional Areas Adjacent to drinking water reservoirs

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	X

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$500,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The project will design and construct regional wet detention ponds to improve the water quality of runoff into the reservoirs. Regional water quality improvement projects have been recommended in the watersheds of the terminal reservoirs. This project is necessary to protect water quality to mitigate the effects of untreated stormwater from private lands and development. Studies document urban growth within reservoir watersheds as detrimental to drinking water quality. Newport News has greater control over water quality protection due to its ownership of more than 12,000 acres of its watershed property.

However, there are areas within the watershed that have been intensively developed over the years and remedial measures are needed to ensure that the water supply for the region is adequately protected from both stormwater and spills. Corrective measures include installation of watershed, "Best Management Practices", facilities such as construction of regional stormwater retention basins (ponds) and diversion of potentially harmful drainages. This project also includes upgrades to existing regional water quality detention facilities to improve nutrient removal and turbidity.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Cash Capital - Operating Budget		$500,000				**$500,000**
Funding Source Total:	**-**	**$500,000**	**-**	**-**	**-**	**$500,000**
PROJECT COST:						
Construction		$500,000				**$500,000**
Planning/Design						**-**
Project Total:	**-**	**$500,000**	**-**	**-**	**-**	**$500,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Waterworks will maintain the capacity and capability to meet customer/system demand at all times.

Waterworks will maintain the public health of the community by being in 100% compliance of all drinking water regulations and less than .05% of customers call pertaining to water quality

WATERWORKS CAPITAL PROJECT

PROJECT NAME:	York County Transmission Main
DEPARTMENT:	Waterworks
CONTACT PERSON:	Steve Carpenter
PHONE:	757-926-1090
PROJECT LOCATION:	York County

DISTRICT:		
	SOUTH	
	CENTRAL	
	NORTH	
	CITYWIDE	

PRIORITIES:		
	Economic Dev & Redev	
	Environmental Sustainability	X
	Community Renewal & Maint	
	Fiscal Mgt & Efficient Ops	
	Max Emphasis Public Safety	
	Mandated/Legal Requirement	

PROJECT CATEGORY:	Waterworks
TOTAL ESTIMATED COST:	$3,300,000
NEW PROJECT:	N

PROJECT DESCRIPTION and/or JUSTIFICATION: The construction of approximately 29,000 feet of 24" treated water transmission main connecting the Waterworks distribution system at the Hubbard's Lane/Penniman Road area to the Lightfoot Area of York County. This pipeline may be phased to allow Waterworks to install a section of treated pipeline previously scheduled as part of the overall project to provide a connection and redundant service to the York County Lightfoot Well Water System.

The overall project cost is approximately $9.2 million. Some of the money was appropriated in a prior project phase. The cost will be shared with York County as a 50/50 split. There also exists the possibility of a developer sharing the cost. Cost will be adjusted if the developer project proceeds prior to Waterworks' need for the pipeline. This project is essential to deliver treated water to Lightfoot once the well system is taken offline.

FUNDING SOURCE(S):	**2017**	**2018**	**2019**	**2020**	**2021**	**5-Yr Project Total**
Revenue Bonds	$3,300,000					**$3,300,000**
Funding Source Total:	**$3,300,000**	**-**	**-**	**-**	**-**	**$3,300,000**
PROJECT COST:						
Construction	$3,300,000					**$3,300,000**
Planning/Design						**-**
Project Total:	**$3,300,000**	**-**	**-**	**-**	**-**	**$3,300,000**

IMPACT ON OPERATING BUDGET:

ANTICIPATED PERFORMANCE / OUTCOME MEASURES: Our customer base will have water available greater than 99.9% of the time as measured over a rolling 12-month period.

Waterworks will maintain the capacity and capability to meet customer/system demand at all times.