



**AGENDA**  
**TOWN COUNCIL SPECIAL MEETING - CIP STRATEGY SESSION**  
**JANUARY 18, 2017, 7:00 PM**  
**TOWN HALL COUNCIL CHAMBERS**

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1. **CALL TO ORDER** (Mayor Fraser)
2. **PRELIMINARY REVIEW OF FY18 CAPITAL IMPROVEMENT PROGRAM (CIP)**
  - a) Management Summary
  - b) Governmental Funds
  - c) Water Fund
  - d) Wastewater Fund
3. **FUTURE PRIORITY PROJECT LIST**
4. **FUTURE PROJECT LIST**
5. **POTENTIAL FUNDING SOURCES**
  - a) Bonds/Debt
  - b) Cash/Reserves
  - c) Intergovernmental Support and Grants
  - d) Proffers
6. **QUESTIONS AND FEEDBACK FROM TOWN COUNCIL** (Town Council and Staff)
7. **ADJOURNMENT**

IF YOU REQUIRE ANY TYPE OF REASONABLE ACCOMMODATION AS A RESULT OF PHYSICAL, SENSORY OR MENTAL DISABILITY IN ORDER TO PARTICIPATE IN THIS MEETING, PLEASE CONTACT DIANA HAYS, TOWN CLERK, AT 540-338-7421. THREE DAYS NOTICE IS REQUESTED.

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**STAFF REPORT**  
**DISCUSSION ITEM**

**SUBJECT:** Capital Improvement Program

**DATE OF MEETING:** January 18, 2017

**STAFF CONTACTS:** Elizabeth Krens and Paula Hicks, Finance  
Alex Vanegas and Dale Lehnig, Public Works  
Rob Lohr and Danny Davis, Administration

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**BACKGROUND:**

The Capital Improvement Plan (CIP) represents a guide for financial decisions, annual budgeting and coordination of major enhancements of the Town's public facilities and other infrastructure over the next 5 years. The CIP reflects the strategic initiatives and operating goals of the Town Council and the Town's Comprehensive Plan. A capital project is defined as a construction, renovation or demolition project, or acquisition of land or other assets, valued in excess of \$50,000 and a useful life exceeding 5 years. The CIP authorizes funding for projects identified in the current budget year and sets a plan for prioritizing and identifying funding for future projects.

Staff has worked over the past year to identify key projects for inclusion in the CIP. Some of these projects have been identified in the past, yet no funding source has been identified. Other projects have been re-prioritized based on Council input and staff's review of critical needs.

In the General Fund, projects include those in the general areas of transportation (including sidewalks), drainage/stormwater improvements, facilities (such as a Police Station), and general maintenance activities.

In the Water Fund, projects include water line replacements, long-term well facilities, treatment options, storage capacity, and other infrastructure needs.

In the Wastewater Fund, projects include infrastructure needs, ongoing system component replacement at the Basham Simms Wastewater Facility, and other infrastructure needs.

The draft CIP as attached is intended to give Council an overview, by Fund, of:

- Completed Projects
- Active Projects
- 5-Year Priority Projects
- Future Projects (those anticipated beyond 5 years)

Staff will request Council review and provide feedback on the proposed projects – primarily those in the 5-Year Priority and Future Projects lists. In addition, staff will ask Council to consider various options for funding these projects.

Staff is continuing to finalize details of funding sources and available cash – more information will be provided at the meeting. Nonetheless, there remains Unassigned Fund Balance which could be used for one or more projects in all three Funds. The Town seeks to utilize VDOT Revenue Sharing and NVTALocal Funds as much as possible for Transportation Projects in the General Fund. And other sources of funding include potential future financing opportunities.

This meeting is intended to be a kick-off for initial discussion of projects and to gauge the Council's priorities. It will also allow Council to ask questions on specific projects so that staff can return with more information, and it will allow Council to suggest additional projects that staff may not have identified as of yet. Future discussions on the CIP will take place during the budget process. The discussion at this meeting will also help inform the next meeting (February 22<sup>nd</sup>) with Davenport and MFSG about the Town's debt, future financing options, and long-term funding sources for both General Fund and Enterprise Fund needs.

## Capital Improvement Plan (CIP) Management Summary

### **Capital Improvement Plan**

The Capital Improvement Plan (CIP) represents a guide for financial decisions, annual budgeting and coordination of major enhancements of the Town's public facilities and other infrastructure over the next 5 years. The CIP reflects the strategic initiatives and operating goals of the Town Council and the Town's Comprehensive Plan. A capital project is defined as a construction, renovation or demolition project, or acquisition of land or other assets, valued in excess of \$50,000 and a useful life exceeding 5 years. The CIP authorizes funding for projects identified in the current budget year and sets a plan for prioritizing and identifying funding for future projects.

### **Capital Project Overview** *(Project counts and dollar values will be added for the proposed budget book)*

#### **Proposed FY18-22 CIP:**

- XX total projects with a cost of XX over the next 5 years
- GF- XX projects with a cost of \$XX
- WF-XX project with a cost of \$XX
- WWF-XX project with a cost of \$XX

**5-Year Priority Projects-** XX total projects with a cost of XX

**Future Projects-** XX total projects

### **How the CIP is Organized**

The capital projects of the CIP are divided by fund (Governmental Funds, Water Fund and Wastewater Fund). Summary charts by funding source and project name are available to show annual project totals.

**Active CIP Projects:** A detailed project sheet is available for each active and approved capital project. Project budgets are generally revised each year as funding, planning, design and other factors may affect cost estimates. The project sheets include:

- **Status-** Projects may be new, ongoing from previous fiscal years or complete.
- **Project Ranking-** Projects are ranked within the specific fund based on need.
- **Program Description-** Details include a project overview, relevant background, anticipated benefits, challenges and progress updates.
- **Operating Impact-** Relevant information regarding ongoing or future operating cost associated with the project.
- **Goals Addressed-** Details how the project pertains to strategic initiatives or operating goals established by Town Council or the Town's Comprehensive Plan.

- **Significant Dates**- Provides a high level project timeline.
- **Planned Uses**- Project costs such as land, design, construction, professional services and miscellaneous are listed by fiscal year and total project.
- **Funding Sources**- Projects often have more than one funding source and may include:
  - **Bonds**- Municipal bonds are debt instruments and may be designated as either General Obligation (GO) or Revenue bonds and tax-exempt or taxable. General Obligation bonds are backed by the total taxing power of the government and Revenue bonds are guaranteed by specific revenues generated by the government and are often associated with enterprise fund projects. Bonds may also be either tax-exempt, with considerable IRS restrictions, or taxable. Currently, all Town bonds are GO.
  - **Cash**- Cash may be transferred from any of the 3 operating funds or unassigned fund balance.
  - **Intergovernmental Support and Grants**- Funding support and grants may be available from other government agencies (Federal, State, Loudoun County, Virginia Department of Transportation (VDOT), Northern Virginia Transportation Authority (NVTA)).
  - **Proffers, Donations and Settlements**- Proffers and monetary donations may be offered by others. The Town received \$5.780 million in funds for transportation projects from Loudoun County via a legal settlement in 2008.

**5-Year Priority Projects:** Although not approved for funding in the current year of the CIP, a listing of priority capital projects is provided for planning short-term projects and funding needs. Often these projects lack identified funding sources or other projects details have not been resolved sufficiently for project commitment. However, inclusion in the CIP is important so that future needs can be prioritized and funding sources can be found. These priorities and dollar amounts may also be helpful for long term financial plan modeling past the 5 year period covered by the CIP. As each year progresses, the project will move closer to being “active” unless the project is deferred or delayed.

**Future Projects:** Long-term future projects are listed for planning purposes. Reliable cost estimates may not be available and additional research or studies are often necessary before projects can be added to the CIP. Typically, these projects will move into the later years of a CIP so that appropriate planning and funding can be established.

## **CIP Development Process**

As the CIP is a multi-year plan, staff meets monthly to review project progress and budget compliance. Council may provide future CIP direction during their Strategic Planning Session held in late summer. In the fall, the Finance Department asks Department Heads to identify new capital projects for consideration during the budget process. In addition, they update the active project detail sheet funding, expenditure and other details in preparation for the new fiscal year's budget. In January, Council meets in a special work session to review the draft CIP, prioritize projects and discuss funding sources in advance of the release of the proposed budget in March. Council may discuss the CIP throughout the budget deliberation process. In accordance with Virginia Code, the Town's operating and capital budget will be adopted by Council for the next fiscal year on or before June 30<sup>th</sup> each year.

A number of important concepts guide the development of the CIP:

- The CIP is an important financial and project planning document developed in conjunction with the annual operating budget process consistent with the Town's Financial Policy Guidelines, the Town's Comprehensive Plan and Council's Strategic Initiatives.
- CIP projects should be expected to result in an asset or physical infrastructure with value exceeding \$50,000 and a useful life of 5 or more years.
- All projects should be thoroughly studied with a strong commitment from elected leaders and staff prior to inclusion in the CIP. Abandonment of a CIP project can be costly with fiscal and accounting consequences, especially after work on the project begins or funding is obtained. Preliminary studies and project evaluation costs needed to determine the merit of a project's inclusion in the CIP are best managed in the Town's operating budget.
- Projects should not be included in the CIP until all funding source are identified.
- Future Project lists are used to track the Town's capital needs prior to placement on the CIP.
- As project funding sources are limited, it is beneficial to look at the CIP in a holistic manner over a 5 year period. Moving specific projects forward without weighing the merits against all Town capital needs can be short sighted as it may displace more critical needs.
- In order to minimize issuance costs associated with new bonds, it is important to look at the CIP in a holistic manner when developing the Town's financing plan.
- Before applying for grants, Council and staff should fully understand and support the grant's matching requirements.
- The operating budget should reflect CIP related operating revenue and expenditure impacts (ie: use of unassigned fund balance, pay-as-you-go cash funding, debt service, preliminary studies, operational costs, asset maintenance costs, bond issuance costs).
- Debt Policies:
  - Debt service expenditures as a percentage of expenditures should not exceed 15%.
  - Bonded debt of the Town shall not exceed 2% of the total assessed value of taxable property.
- Reserve Policies:
  - Unassigned Governmental Fund balance should be a minimum of \$3 million or 30% of total revenues.
  - Utility cash and equivalents should exceed 100% of total operating expenditures and debt service.

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**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	5,085,531	1,879,375	2,616,330	589,826	-	-	-	-	589,826
NVTA	1,466,112	334,011	580,713	551,388	-	-	-	-	551,388
Cash	1,226,943	231,346	894,597	101,000	-	-	-	-	101,000
County Settlement	1,045,683	915,269	130,414	-	-	-	-	-	-
County Funding	814,831	546,515	268,316	-	-	-	-	-	-
Federal Earmark	499,915	499,915	-	-	-	-	-	-	-
Bonds-SunTrust (08)	181,277	181,277	-	-	-	-	-	-	-
Bonds-Cardinal (12)	476,807	354,166	122,641	-	-	-	-	-	-
Other	247,804	247,804	-	-	-	-	-	-	-
	11,044,903	5,189,678	4,613,011	1,242,214	-	-	-	-	1,242,214

**CIP Uses by Fund**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Governmental Funds	9,955,886	4,817,302	3,896,370	1,242,214	-	-	-	-	1,242,214
Water Fund	889,017	372,376	516,641	-	-	-	-	-	-
Wastewater Fund	200,000	-	200,000	-	-	-	-	-	-
	11,044,903	5,189,678	4,613,011	1,242,214	-	-	-	-	1,242,214

# **Governmental Funds Projects**

**Capital Improvement Program**

**Governmental Funds**

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	5,085,531	1,879,375	2,616,330	589,826	-	-	-	-	589,826
NVTA	1,466,112	334,011	580,713	551,388	-	-	-	-	551,388
Cash	632,943	231,346	300,597	101,000	-	-	-	-	101,000
County Settlement	1,045,683	915,269	130,414	-	-	-	-	-	-
County Funding	814,831	546,515	268,316	-	-	-	-	-	-
Federal Earmark Allocation	499,915	499,915	-	-	-	-	-	-	-
Bonds-SunTrust (08)	163,067	163,067	-	-	-	-	-	-	-
Other	247,804	247,804	-	-	-	-	-	-	-
	9,955,886	4,817,302	3,896,370	1,242,214	-	-	-	-	1,242,214

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Downtown Streetscapes PH 2	2,341,350	1,501,083	840,267	-	-	-	-	-	-
Main & Maple Intersection Improvements	1,338,832	366,435	972,397	-	-	-	-	-	-
East Main St. Sidewalk Improvements	768,481	768,481	-	-	-	-	-	-	-
N. 21st St. Sidewalk Improvement	1,421,127	1,252,518	168,609	-	-	-	-	-	-
Hirst Road Improvements	1,090,446	-	216,294	874,152	-	-	-	-	874,152
County Funded Fireman's Field Upgrades	750,000	696,515	53,485	-	-	-	-	-	-
Nursery Avenue Improvements	1,823,150	151,636	1,404,452	267,062	-	-	-	-	267,062
Upgrade Financial Software	422,500	80,634	240,866	101,000	-	-	-	-	101,000
	9,955,886	4,817,302	3,896,370	1,242,214	-	-	-	-	1,242,214

# Completed Projects

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**TITLE:** Downtown Streetscapes PH 2 (119-4094100-0602)

**STATUS:** Complete

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** A phased project to enhance Downtown Purcellville, primarily 21st and 23rd Streets. Partial funding is through the Federal Transportation Enhancement Grant Program. Related work was completed several years ago, and included the downtown parking lot and gazebo, N. 23rd Street improvements, crosswalks on N. 23rd Street and N. 21st Street, and the hardscaping around the train station. Phase 2 includes new curb and gutter, sidewalk and roadway reconstruction from the intersection of N. 21st and Main Streets to the terminus of Phase 1 work. The work in Phase 2 is substantially complete, the final payment application has been submitted and final paperwork is under review.

**OPERATING IMPACT:** The town will be required to maintain the roadway, sidewalks, curb and gutter, crosswalks and storm sewer. Maintenance costs are unchanged for existing roadway and sidewalks that are replaced. Maintenance for new sidewalks is estimated below.

**GOAL ADDRESSED:** 2009 Town-wide Transportation Plan

- Provide facilities that function appropriately in serving vehicles, pedestrians, bicycles and transit.
- Ensure transportation safety and security.
- Improve community connectivity, preserve special community assets and promote attractive environments.
- Provide a high-quality transportation experience for all users and modes of transportation.
- Support community growth and maturation.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
	March 2015 (phase 2)	November 2015 (phase 2)

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Downtown Streetscapes PH 2 (119-4094100-0602)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	1,209,665	500,992	708,673	-	-	-	-	-	-
Federal Earmark	499,915	499,915	-	-	-	-	-	-	-
County Settlement	572,039	500,176	71,863	-	-	-	-	-	-
Cash	59,731	-	59,731	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	2,341,350	1,501,083	840,267	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	825	825	-	-	-	-	-	-	-
Engineering/Design	264,864	264,864	-	-	-	-	-	-	-
Construction	1,886,823	1,076,556	810,267	-	-	-	-	-	-
Professional Services	184,485	154,485	30,000	-	-	-	-	-	-
Miscellaneous	4,353	4,353	-	-	-	-	-	-	-
	2,341,350	1,501,083	840,267	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Sidewalk Maintenance	-	1,000	1,000	1,000	1,000	1,000	5,000

**Capital Improvement Program**

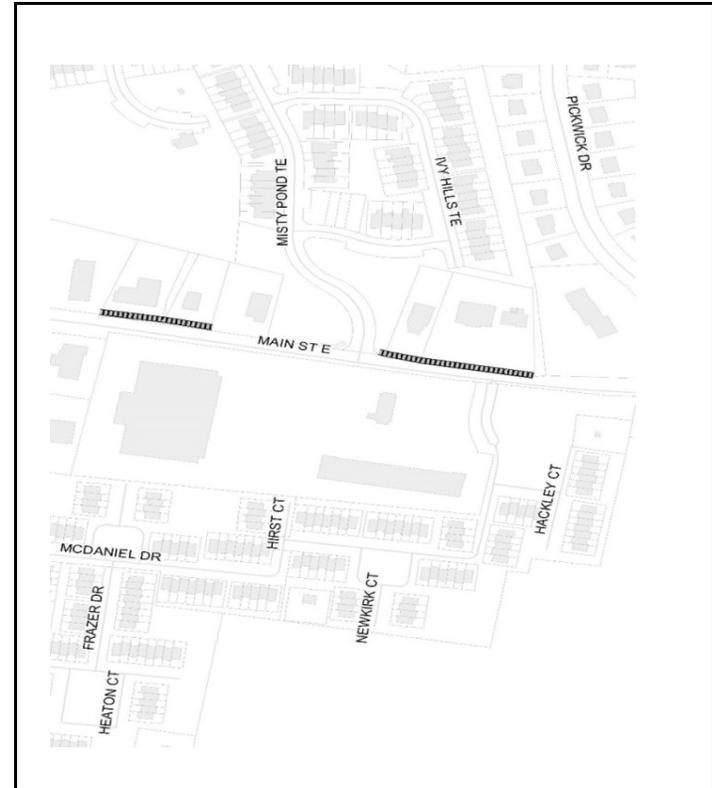
**Governmental Funds**

**TITLE:** East Main St. Sidewalk Improvements (119-4094202)

**STATUS:** Complete

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** The purpose of this project is to construct missing sidewalk segments around the Town to promote pedestrian access. Sidewalk is proposed along northside of E. Main Street from Pickwick Dr to Maple Ave. (2400 linear feet)



**OPERATING IMPACT:** The town will maintain the sidewalks, curb and gutter and storm sewer. Maintenance for new sidewalks is estimated below.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - New street, pedestrian and trail connections will enhance community connectivity, preserve special community assets, promote attractive environments and improve transportation safety.
- Public Utilities and Transportation - Purcellville will be recognized for its effective inter-modal transportation system and quality bicycle and pedestrian accommodations. Public rights-of-way will be improved to encourage safe and effective access.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
December 2008	July 2014	October 2015

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** East Main St. Sidewalk Improvements (119-4094202)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	280,956	280,956	-	-	-	-	-	-	-
NVTA	258,460	258,460	-	-	-	-	-	-	-
County Settlement	93,332	93,332	-	-	-	-	-	-	-
Bonds-SunTrust (08)	65,414	65,414	-	-	-	-	-	-	-
Other	70,319	70,319	-	-	-	-	-	-	-
	768,481	768,481	-	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	504	504	-	-	-	-	-	-	-
Engineering/Design	172,967	172,967	-	-	-	-	-	-	-
Construction	459,503	459,503	-	-	-	-	-	-	-
Professional Services	130,985	130,985	-	-	-	-	-	-	-
Miscellaneous	4,522	4,522	-	-	-	-	-	-	-
	768,481	768,481	-	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Lane Mile Maintenance	-	1,000	1,000	1,000	1,000	1,000	5,000

**TITLE:** N. 21st St. Sidewalk Improvement (119-4094206)

**STATUS:** Complete

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** The purpose of this project is to construct missing sidewalk segments around the Town to promote pedestrian access. N 21st Street Project From Banbury Glen Ct to O St (1700 ft). This sidewalk section will connect two residential developments to the Downtown. Project is from the 2004 Sidewalk Priority List Developed by the Parks and Recreation Advisory Board.

**OPERATING IMPACT:** The town will maintain the roadway, sidewalks, curb and gutter and storm sewer. Maintenance costs are unchanged for existing roadway and sidewalks that are replaced. Maintenance for new sidewalks, curb and gutter and storm sewer is estimated below.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will be recognized for its effective inter-modal transportation system and quality bicycle and pedestrian accommodations. Public rights-of-way will be improved to encourage safe and effective access.
- Public Utilities and Transportation - New street, pedestrian and trail connections will enhance community connectivity, preserve special community assets, promote attractive environments and improve transportation safety.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
April 2009	January 2012	October 2016

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** N. 21st St. Sidewalk Improvement (119-4094206)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	1,056,951	894,047	162,904	-	-	-	-	-	-
County Settlement	317,665	311,960	5,705	-	-	-	-	-	-
Cash	712	712	-	-	-	-	-	-	-
Bonds-SunTrust (08)	43,485	43,485	-	-	-	-	-	-	-
Other	2,314	2,314	-	-	-	-	-	-	-
	1,421,127	1,252,518	168,609	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	34,713	34,713	-	-	-	-	-	-	-
Engineering/Design	297,384	279,466	17,918	-	-	-	-	-	-
Construction	971,198	820,507	150,691	-	-	-	-	-	-
Professional Services	117,832	117,832	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	1,421,127	1,252,518	168,609	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Lane Mile Maintenance	-	2,000	2,000	2,000	2,000	2,000	10,000

# Ongoing Projects

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**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Main & Maple Intersection Improvements (119-4094201)

**STATUS:** Ongoing

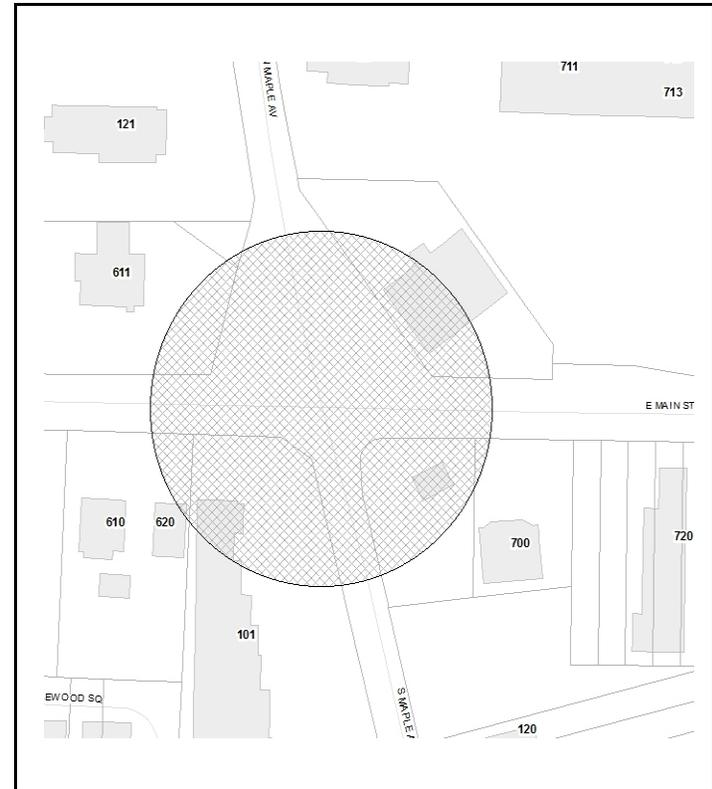
**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** Originally, the project envisioned significant changes to the intersection, including roadway widening, turn lanes, driveway closures, changes to the signalization. The preliminary plans for this project have served as a guide for frontage improvements in this area, for both Town projects and as properties have redeveloped. Due to the high costs for the full project, and opposition from property owners, the project has been rescoped to construct a portion of recommended improvements in a phased manner. Phase 1 includes the construction of sidewalk along the northwest corner of the intersection, improvements to the pedestrian signalization, and a new mid-block crosswalk west of the intersection. The next phases are currently undefined, but will provide additional improvements for pedestrian safety.

**OPERATING IMPACT:** State maintained road; minimal impact to operating budget due to added sidewalk.

**GOAL ADDRESSED:** 2009 Town-wide Transportation Plan

- Support community growth and maturation.
- Provide facilities that function appropriately in serving vehicles, pedestrians, bicycles and transit.
- Ensure transportation safety and security.
- Improve community connectivity.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
August 2016	December 2018	June 2019

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Main & Maple Intersection Improvements (119-4094201)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	1,081,161	127,295	953,866	-	-	-	-	-	-
NVTA	13,332	-	13,332	-	-	-	-	-	-
County Settlement	15,000	9,801	5,199	-	-	-	-	-	-
Bonds-SunTrust (08)	54,168	54,168	-	-	-	-	-	-	-
Other	175,171	175,171	-	-	-	-	-	-	-
	1,338,832	366,435	972,397	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	375,000	-	375,000	-	-	-	-	-	-
Engineering/Design	616,078	307,588	308,490	-	-	-	-	-	-
Construction	290,679	40,861	249,818	-	-	-	-	-	-
Professional Services	57,075	17,986	39,089	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	1,338,832	366,435	972,397	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Lane Mile Maintenance		2,500	2,500	2,500	2,500	2,500	12,500

**Additional Information/Questions:****Background:**

- In 2005, the Town's consultant, Kimley-Horn, completed a comprehensive transportation study on behalf of the Town of Purcellville for improvement to the intersection of Main Street and Maple Avenue. Through a public involvement process that included meetings with citizens, Town Council members, and Town staff, the study resulted in a consensus-based preferred concept design for improvements to the intersection, as well as to street improvements along Main Street and Maple Avenue.
- In 2006, Kimley-Horn completed preliminary design of the improvements. After Town review, and with input from the public and landowners, the design was slightly altered. By mid-2007, the design plans were at 50% completion. After additional meetings with individual landowners, a set of plans was presented at a public meeting in 2010. The cost estimate for the full Main and Maple Intersection Improvements was high, and project funding for construction was not available. In addition, opposition from some of the key landowners where easements or right-of-way was needed were resistant to the project.
- In April 2011, a streetscape master plan of E. Main Street was vetted with the Town Council and the public to guide the context and design of the Main Street corridor.
- The Town applied for Federal/State Urban funding, and in 2005, received a federal grant of \$816,340 for PE stage. The Town has a 2% responsibility contribution for the use of the Urban funds. The Town also receives RSTP funding (\$125,000) from the state for the PE and right-of-way (ROW) stage. The Town has a 50% match responsibility for the RSTP funds. As of 8/31/2016, \$313,622 of the Federal/State Urban funding has been spent on the PE phase of the Main and Maple Intersection Improvements. Only the PE phase has been authorized. We anticipate receiving ROW phase authorization from VDOT in February, which will allow the Town to begin negotiations with affected landowners. The grants do not include costs for construction.
- Some of the improvements that were included in the design have been completed by private developers as their property was redeveloped. This includes the frontage improvements along the north side of Main Street in front of the Shoppes at Main and Maple, and the McDonald's on the west side of Maple Avenue. During the review of these site plans, the Town requested these developers to install frontage improvements in accordance with the Main Street and Maple Avenue 50% plans.

- Other improvements that have been made at the intersection and nearby are:
  - 2004 – Re-striping Maple Avenue for left-turn lanes
  - 2012 – VDOT replaced the traffic signal
  - 2012 – Multiuse trail constructed along N. Maple Avenue from E. Main Street to 200 N. Maple Avenue.
- In 2014, VDOT informed the Town that we needed to more expeditiously expend funds associated with the subject project, and continue to push forward with it, or risk losing the allocated funding. Further, if the Town does not continue to move forward, we risk having to pay back the funding already received from the Federal/State funds.
- The Town, in consultation Kimley-Horn and VDOT, determined that a re-scope of the project would help to keep this project moving forward. Kimley-Horn collected traffic and pedestrian counts and evaluated the signal phasing and timing for several scenarios for pedestrian and vehicular level of service and safety. Based on the study, Kimley-Horn recommended the following:
  - Implement a Leading Pedestrian Interval signal for pedestrians crossing Main Street
  - Complete the missing sidewalk path along the NW corner of the intersection
  - Install a mid-block crosswalk across Main Street.
- Town Council approved moving forward to design and construct the improvements.
- Currently, the design is 60% complete, and the environmental documentation has been completed. The Town advertised a “Notice of Willingness”; that is, a willingness to hold a public hearing for this project if we receive any requests to do so. The next step will be to request authorization from VDOT to proceed to the right-of-way phase, and begin discussions with affected property owners. For the safety improvements recommended, only three property owners are affected, and these are temporary construction easements.

**Next Steps:**

- Move forward with construction of the sidewalk, crosswalk and signal modification.
- Propose additional phases of work along the Main Street corridor, in order to continue to expend the funding.

**Future phases that are under consideration:**

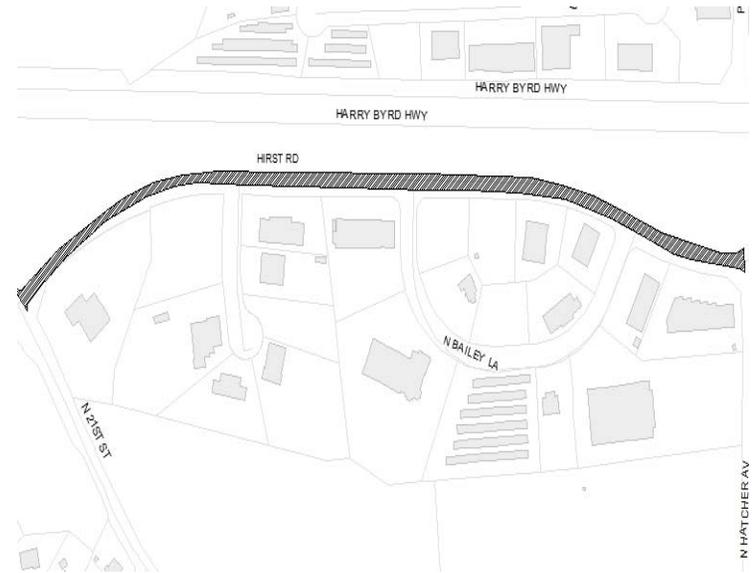
- Sidewalk connections: across 871 E. Main Street, from 1043 E. Main Street to Pickwick Drive
- Improvements along S. Maple Avenue to include curb and gutter and associated drainage improvements

**TITLE:** Hirst Road Improvements (119-4094276)

**STATUS:** Ongoing

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** The Town maintains the portion of Hirst Road from Route 690 (N. 21st Street) to just east of Hatcher Road. Due to significant maintenance concerns for Hirst Road, the Town has contracted with our Engineer for a roadway improvement project. The full project could not move forward due to the high cost of the full roadway reconstruction. This project is a rescoped project that addresses safety concerns associated with the existing pedestrian pathway and ADA accessibility, roadway shoulders, and guardrail.



**OPERATING IMPACT:** facilities are existing, minimal increase in maintenance costs.

**GOAL ADDRESSED:** 2009 Town-wide Transportation Plan

- Provide facilities that function appropriately in serving vehicles, pedestrians, bicycles and transit.
- Ensure transportation safety and security.
- Improve community connectivity.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
October 2016	April 2018	December 2018

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Hirst Road Improvements (119-4094276)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	545,223	-	108,147	437,076	-	-	-	-	437,076
NVTA	497,576	-	60,500	437,076	-	-	-	-	437,076
County Settlement	47,647	-	47,647	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	1,090,446	-	216,294	874,152	-	-	-	-	874,152

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	31,000	-	31,000	-	-	-	-	-	-
Engineering/Design	185,294	-	185,294	-	-	-	-	-	-
Construction	787,000	-	-	787,000	-	-	-	-	787,000
Professional Services	87,152	-	-	87,152	-	-	-	-	87,152
Miscellaneous	-	-	-	-	-	-	-	-	-
	1,090,446	-	216,294	874,152	-	-	-	-	874,152

**Operating Impact**

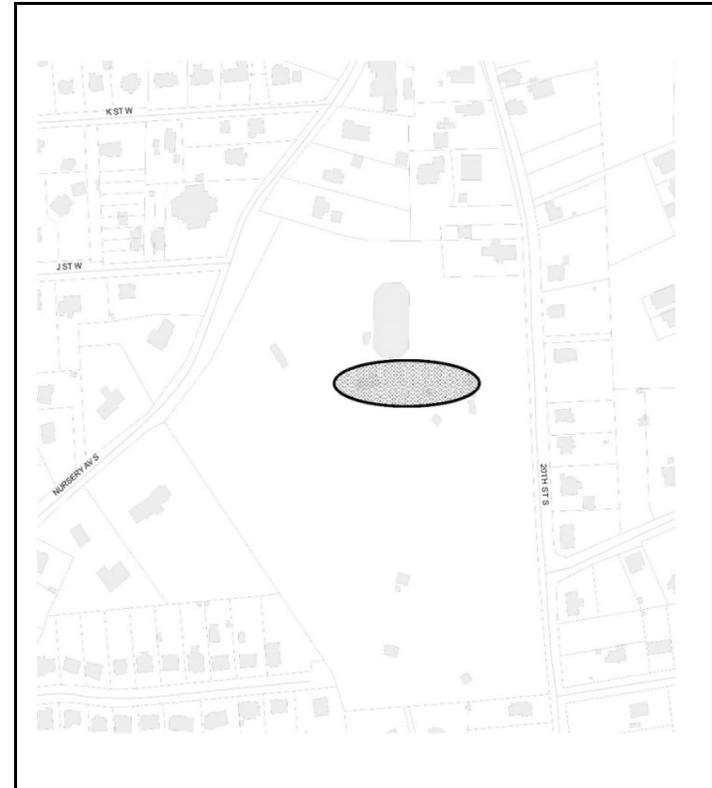
Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Lane Mile Maintenance	-	-	500	500	500	500	2,000

**TITLE:** County Funded Fireman's Field Upgrades (119-4094278)

**STATUS:** Ongoing

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** Initially this project covered the design and construction of a control booth at the main entry point of Fireman's Field and the consolidation of several storage and maintenance sheds in to a single facility with use shared by Town, County and athletic league users. Due to a historic conservation easement on the property, all design elements are subject to the review and approval of the Virginia Department of Historic Resources. The project has also included the rebuild of the press box. The final upgrade to be completed is rebuilding the pavilion.



**OPERATING IMPACT:** Replaces existing buildings. Assume maintenance costs annually are .5% of building construction cost.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- People and Neighborhoods - Residents and visitors of Purcellville will experience an enhanced quality of life that is characterized by excellent education opportunities, outstanding recreational amenities, diverse and affordable housing, and quality social activities and support systems.
- Environment - Purcellville will be known as a community with high environmental standards and one that protects its heritage, special amenities and scenic views.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
October 2012	July 2013	June 2017

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** County Funded Fireman's Field Upgrades (119-4094278)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	150,000	150,000	-	-	-	-	-	-	-
County Funding	600,000	546,515	53,485	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	750,000	696,515	53,485	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	99,675	99,675	-	-	-	-	-	-	-
Construction	619,556	566,071	53,485	-	-	-	-	-	-
Professional Services	20,298	20,298	-	-	-	-	-	-	-
Miscellaneous	10,471	10,471	-	-	-	-	-	-	-
	750,000	696,515	53,485	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Building Maintenance	-	1,800	1,800	1,800	1,800	1,800	9,000

**TITLE:** Nursery Avenue Improvements (119-4094283)

**STATUS:** Ongoing

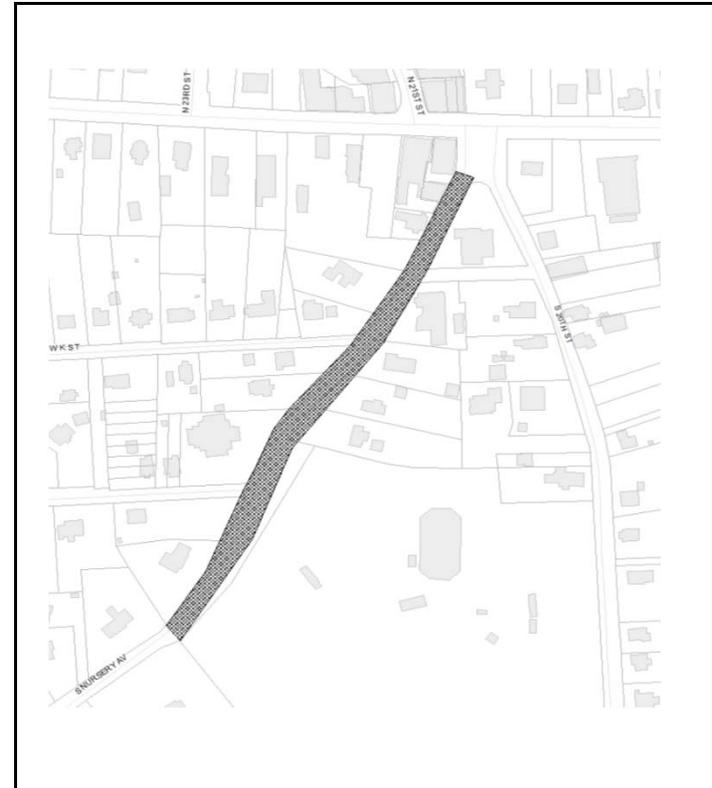
**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** Project limits are South Nursery Ave. between the Main St. tear-drop and north of West School Street. Work includes the improvements to the roadway, pedestrian facilities, and drainage. An enclosed, underground storm sewer system will be installed to improve the drainage . Sidewalks will be replaced and brought to current standards and requirements. The roadway will be improved including new pavement, lane and cross section improvements, and various other roadway elements. It is also anticipated that utility relocations and right-of-way/easement acquisitions will be required.

**OPERATING IMPACT:** Replacement/improvement of existing roadway and pedestrian facilities - no change

**GOAL ADDRESSED:** 2009 Town-wide Transportation Plan

- Support community growth and maturation.
- Provide facilities that function appropriately in serving vehicles, pedestrians, bicycles and transit.
- Ensure transportation safety and security.
- Improve community connectivity, preserve special community assets, and promote attractive environments.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
July 2015	April 2018	

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Nursery Avenue Improvements (119-4094283)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	911,575	76,085	682,740	152,750	-	-	-	-	152,750
NVTA	696,744	75,551	506,881	114,312	-	-	-	-	114,312
County Funding	214,831	-	214,831	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	1,823,150	151,636	1,404,452	267,062	-	-	-	-	267,062

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	173,500	-	173,500	-	-	-	-	-	-
Engineering/Design	590,526	150,773	439,753	-	-	-	-	-	-
Construction	984,124	-	742,062	242,062	-	-	-	-	242,062
Professional Services	74,466	329	49,137	25,000	-	-	-	-	25,000
Miscellaneous	534	534	-	-	-	-	-	-	-
	1,823,150	151,636	1,404,452	267,062	-	-	-	-	267,062

**Operating Impact**

Operating/Maintenance Type of expenditure	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
	-	-	-	-	-	-	-

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Upgrade Financial Software (119-4094284)

**STATUS:** Ongoing

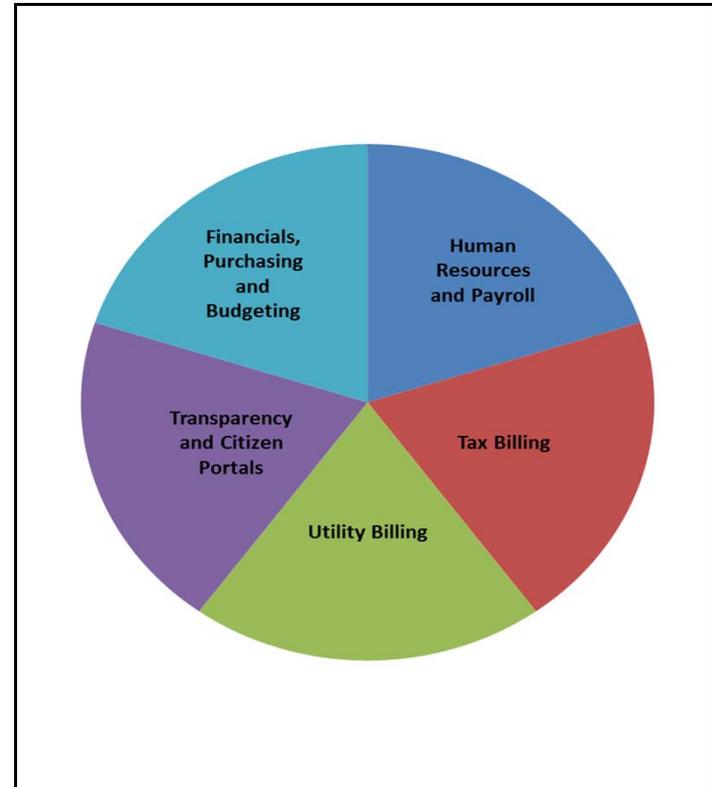
**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** This project involves the implementation of the Tyler/Munis financial software, a long-term improvement to the Town's critical business infrastructure. The new software will replace the current Logics and Capital Tax products including core financials, purchasing, budget, payroll, tax billing and utility billing systems. Included in this upgrade are new capabilities to integrate tax and financial softwares, employee and customer web based portals, citizen transparency portal, human resource management software, disaster recovery services, data conversions and staff training. This enhancement will allow staff to work more efficiently and complete tasks in a more effective and timely manner, improve internal controls, enhance transparency and eliminate the need for staff to continually work around the current system limitations.

**OPERATING IMPACT:** Post implementation, the estimated annual support cost is \$40,124 and will be included in the Finance Department's budget.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
		August 2018

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Upgrade Financial Software (119-4094284)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	422,500	80,634	240,866	101,000	-	-	-	-	101,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	422,500	80,634	240,866	101,000	-	-	-	-	101,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	422,500	80,634	240,866	101,000	-	-	-	-	101,000
	422,500	80,634	240,866	101,000	-	-	-	-	101,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Software Support	-	-	40,124	40,124	40,124	40,124	160,496

# **5-Year Priority Projects**

**Capital Improvement Program**

**5 Year Priority Projects**

**Governmental Funds**

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	2,528,500	-	133,500	1,355,000	522,500	517,500	-	-	2,395,000
NVTA	1,057,319	-	133,500	410,000	472,500	41,319	-	-	923,819
Unidentified	8,383,181	-	-	1,355,000	245,000	783,181	3,000,000	3,000,000	8,383,181
SLAF Grant	300,000	-	-	300,000	-	-	-	-	300,000
County Funding	875,000	-	-	875,000	-	-	-	-	875,000
	13,144,000	-	267,000	4,295,000	1,240,000	1,342,000	3,000,000	3,000,000	12,877,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
32nd & A Street Intersection Improvements	2,267,000	-	267,000	2,000,000	-	-	-	-	2,000,000
Traffic Signal 32nd & Main	900,000	-	-	200,000	700,000	-	-	-	900,000
12th Street Improvements	2,000,000	-	-	620,000	345,000	1,035,000	-	-	2,000,000
A Street Trail from BRMS to Maple	875,000	-	-	875,000	-	-	-	-	875,000
Hirst Farm Pond Conversion	600,000	-	-	600,000	-	-	-	-	600,000
Police Station	6,000,000	-	-	-	-	-	3,000,000	3,000,000	6,000,000
Villages of Purcellville Drainage	307,000	-	-	-	-	307,000	-	-	307,000
House Demolition-301 S 20th St.	45,000	-	-	-	45,000	-	-	-	45,000
Bush Tabernacle Floor Replacement	150,000	-	-	-	150,000	-	-	-	150,000
	13,144,000	-	267,000	4,295,000	1,240,000	1,342,000	3,000,000	3,000,000	12,877,000

**Governmental Funds**

Project Name	Project Summary	Estimated Cost	Status
Hirst Farm Pond Conversion	The development of the Hirst Farm Subdivision started in 2002 and an extended detention dry pond was proposed as the storm water management facility for the entire project. During construction it was used as a sediment basin as specified in the Erosion/Siltation Control plans. Due to difficulties experienced by the developer the project was stopped before completion and the sediment basin was never retrofit to fully meet the criteria of Loudoun County for an extended detention dry pond. The Town of Purcellville now intends to explore the option of converting the existing facility into a wet pond. A wet pond is a facility that provides a permanent pool of standing water which promotes a better environment for gravitational settling, biological uptake, and microbial activity.	\$600,000	\$300,000 DEQ Grant received but required match is not yet indentified.
32nd & A Street Improvements	Intersection improvements at the intersection of S. 32nd and A Streets are contemplated with this project. Options include a roundabout, or turn lanes. A study of this intersection show that either of these options is acceptable from a safety or level of service standpoint.	\$2,267,000	VDOT Grant for \$1,078,000 received. Funding match is needed.
12th Street Improvements	Drainage and street improvements including storm sewer & inlets, curb and gutter, sidewalk and roadway improvements. Will be applying for VDOT grant funding in November 2016	\$2,000,000	In November 2016 requested VDOT Grant. Funding match is needed.

**Governmental Funds**

Project Name	Project Summary	Estimated Cost	Status
Traffic Signal 32nd & Main	Conduct a feasibility study to determine usefulness and if needed install traffic signal and intersection improvements. Warrant analysis was conducted at the request of the Town Council. Based on the data collected, a traffic signal was needed.	\$900,000	In November 2016 requested VDOT Grant. Funding match is needed.
A Street Trail from Blue Ridge Middle School to Maple Avenue	Design and construction of a sidewalk/multipurpose trail along A Street from Blue Ridge Middle School to Maple Avenue. Letter has been sent to Loudoun County requesting funding for this project.	\$875,000	Requested funding from Loudoun County
Police Station	The Purcellville Police Department currently occupies a portion of a general office building as its headquarters. The space is very limited and does not provide adequate space for staff, interrogation rooms, community meeting space, or storage. The Town intends to build a new Police Headquarters that would address these issues and also provide for a greater level of security for police staff, cruisers, and equipment.	\$3,000,000 min. to \$8,000,000 max.	Awaiting Funding
Villages of Purcellville Drainage	Design and construction to replace the deteriorating concrete ditch that is in an easement west of some of the homes along Pickwick Drive. This may be partially funded through VDOT Maintenance funds, since a portion of the runoff is generated from roadways and right-of-way within the watershed.	\$307,000	Awaiting Funding

**Governmental Funds**

Project Name	Project Summary	Estimated Cost	Status
House Demolition 301 S Twentieth St.	Demolition of the existing structure located at 301 S. 20th Street.	\$45,000	Awaiting Funding
Bush Tabernacle Floor Replacement	Replacement flooring.	\$150,000	Awaiting Funding

Draft detail sheets are available for some projects. In the proposed budget document, detail sheets will not be included for a project until it is approved by Council to move forward.

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**TITLE:** Hirst Farm Pond Conversion (119-4094279)

**STATUS:** Future

**PROJECT RANKING:** 1

**PROGRAM DESCRIPTION:** The development of the Hirst Farm Subdivision started in 2002 and an extended detention dry pond was proposed as the storm water management facility for the entire project. During construction it was used as a sediment basin as specified in the Erosion/Siltation Control plans. Due to difficulties experienced by the developer the project was stopped before completion and the sediment basin was never retrofit to fully meet the criteria of Loudoun County for an extended detention dry pond. The Town of Purcellville now intends to explore the option of converting the existing facility into a wet pond. A wet pond is a facility that provides a permanent pool of standing water which promotes a better environment for gravitational settling, biological uptake, and microbial activity.

GFOA has suggested that using a picture instead of a map makes the presentation more inviting to the reader.

**OPERATING IMPACT:** Maintenance of the pond will become HOA responsibility upon completion of the work.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Identify the section of the above plan that this project pertains to and how it satisfies that goal.
- Identify the section of the above plan that this project pertains to and how it satisfies that goal.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
	July 2017	December 2017

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Hirst Farm Pond Conversion (119-4094279)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
SLAF Grant	300,000	-	-	300,000	-	-	-	-	300,000
Unidentified	300,000	-	-	300,000	-	-	-	-	300,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	600,000	-	-	600,000	-	-	-	-	600,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	100,000	-	-	100,000	-	-	-	-	100,000
Construction	500,000	-	-	500,000	-	-	-	-	500,000
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	600,000	-	-	600,000	-	-	-	-	600,000

**Operating Impact**

Operating/Maintenance Type of expenditure	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
	-	-	-	-	-	-	-

**Additional Information/Questions:**

- The Town has been approved for a SLAF grant from the VA DEQ, in the amount of \$300,000. This is a 50-50 split between the Town and the grant funds. Funding will cover design, bid services and construction. However, funds for reimbursement can be requested only after a contractor has been approved to move forward with the construction.
- Loudoun County has been contacted and has been asked to consider contributing 25% of the overall cost. Loudoun County staff is looking into this and we expect to have a response by mid- to end of January 2017.
- SLAF (stormwater local assistance funds) from VA DEQ are very competitive. If the Town does not move forward with this project, it could jeopardize future grant applications/requests.

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**Capital Improvement Program**

**Governmental Funds**

**TITLE:** 32nd & A Street Intersection Improvements (119-4094285)

**STATUS:** Future

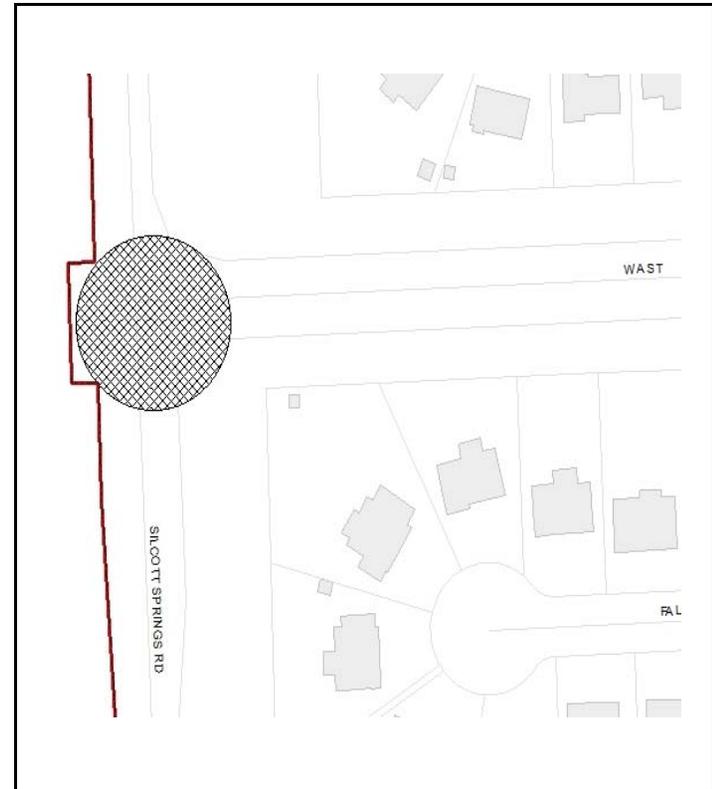
**PROJECT RANKING:** 2

**PROGRAM DESCRIPTION:** Intersection improvements at the intersection of S. 32nd and A Streets are contemplated with this project. Options include a roundabout, or turn lanes. A study of this intersection show that either of these options is acceptable from a safety or level of service standpoint.

**OPERATING IMPACT:** costs depend on option chosen.

**GOAL ADDRESSED:** 2009 Town-wide Transportation Plan

- Support community growth and maturation.
- Provide facilities that function appropriately in serving vehicles, pedestrians, bicycles and transit.
- Ensure transportation safety and security.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** 32nd & A Street Intersection Improvements (119-4094285)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	1,078,500	-	133,500	945,000	-	-	-	-	945,000
NVTA	133,500	-	133,500	-	-	-	-	-	-
Unidentified	1,055,000	-	-	1,055,000	-	-	-	-	1,055,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	2,267,000	-	267,000	2,000,000	-	-	-	-	2,000,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	50,000	-	50,000	-	-	-	-	-	-
Engineering/Design	217,000	-	217,000	-	-	-	-	-	-
Construction	1,800,000	-	-	1,800,000	-	-	-	-	1,800,000
Professional Services	200,000	-	-	200,000	-	-	-	-	200,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	2,267,000	-	267,000	2,000,000	-	-	-	-	2,000,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	500	500	500	500	2,000

**Additional Information/Questions:**

- The Town has requested and received funding through the VDOT Revenue Sharing program. The costs for the project were estimated assuming the construction of a roundabout. The viability of the project was at least partially dependent on the bond \$\$ that were held by VDOT for the original project that was to be constructed by the developer of Hirst Farm subdivision. VDOT declined to move forward with calling the bond, and released the bond. The Town determined to reconsider the project scope. A study was performed by the Town's transportation engineering consultant, AMT.
- The study performed showed that the level of service at the intersection is acceptable with no work, with turn lanes only, or with a roundabout. Staff seeks guidance from TC on how to proceed. Staff recommends either the turn lanes or the roundabout. To do nothing could jeopardize the Town's chances to receive future revenue sharing allocations.

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**TITLE:** 12th Street Improvements (119-4094286)

**STATUS:** Future

**PROJECT RANKING:** 3

**PROGRAM DESCRIPTION:** Drainage and street improvements including storm sewer & inlets, curb and gutter, sidewalk and roadway improvements. Will be applying for VDOT grant funding in November 2016

**OPERATING IMPACT:** Increased maintenance costs due to new sidewalk where none previously existed, additional curb and gutter, additional storm sewer.

**GOAL ADDRESSED:** 2009 Town-wide Transportation Plan

- Support community growth and maturation.
- Provide facilities that function appropriately in serving vehicles, pedestrians, bicycles and transit.
- Provide a high-quality transportation experience for all users and modes of transportation.
- Ensure transportation safety and security.
- Improve community connectivity.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
September 2017	March 2019	March 2020

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** 12th Street Improvements (119-4094286)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	1,000,000	-	-	310,000	172,500	517,500	-	-	1,000,000
NVTA	523,819	-	-	310,000	172,500	41,319	-	-	523,819
Unidentified	476,181	-	-	-	-	476,181	-	-	476,181
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	2,000,000	-	-	620,000	345,000	1,035,000	-	-	2,000,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	200,000	-	-	200,000	-	-	-	-	200,000
Engineering/Design	420,000	-	-	420,000	-	-	-	-	420,000
Construction	1,280,000	-	-	-	320,000	960,000	-	-	1,280,000
Professional Services	100,000	-	-	-	25,000	75,000	-	-	100,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	2,000,000	-	-	620,000	345,000	1,035,000	-	-	2,000,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Lane Mile Maintenance	-	-	-	500	500	500	1,500

**Additional Information/Questions:**

- This is a joint General Fund and Water Fund Project meant to address drainage and stormwater issues, transportation safety issues, pedestrian access and safety, asphalt failures, and utility issues (replace aging water main).
- Council previously considered a number of options, from minimal scope to full-scope.
- The Council has requested a VDOT Revenue Sharing Grant and anticipates receipt of that in order to continue with the project.
- Coordinating the water main replacement with the road work will result in cost and time savings over doing the projects separately.
- No funding source has been identified. If this remains a Council priority, using Fund Balance would serve as a match to the VDOT Grant (if received) and could allow the project to proceed.

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**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Traffic Signal 32nd & Main

**STATUS:** Future

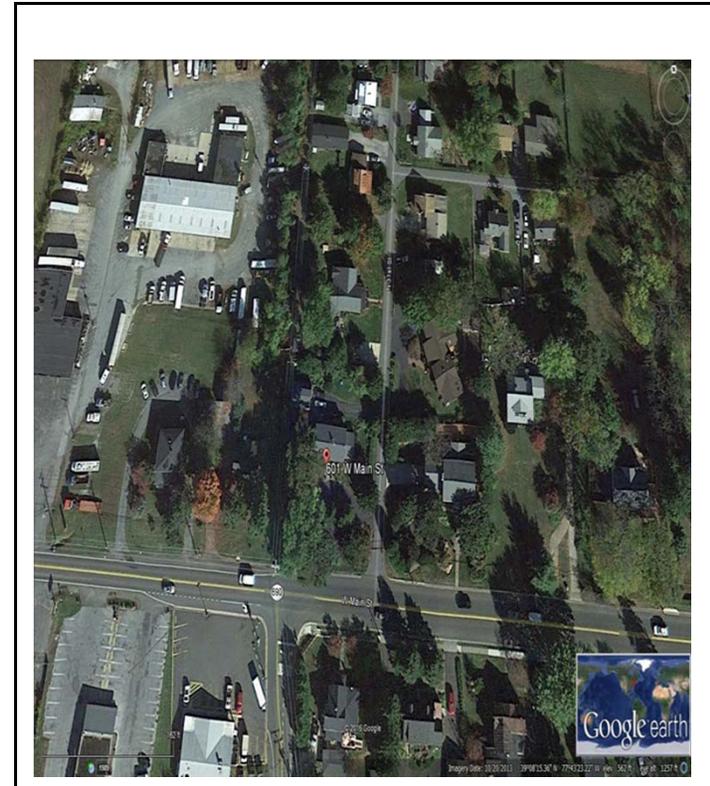
**PROJECT RANKING:** 4

**PROGRAM DESCRIPTION:** Conduct a feasibility study to determine usefulness and if needed install traffic signal and intersection improvements.

**OPERATING IMPACT:** If the traffic signal is installed, the Town will have to outsource the preventative maintenance contract

**GOAL ADDRESSED:** 2009 Town-wide Transportation Plan

- Provide facilities that function appropriately in serving vehicles, pedestrians, bicycles and transit.
- Ensure transportation safety and security.
- Improve community connectivity.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2018	2019	2019

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** Traffic Signal 32nd & Main

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Grants-VDOT	450,000	-	-	100,000	350,000	-	-	-	450,000
NVTA	400,000	-	-	100,000	300,000	-	-	-	400,000
Unidentified	50,000	-	-	-	50,000	-	-	-	50,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	900,000	-	-	200,000	700,000	-	-	-	900,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	80,000	-	-	80,000	-	-	-	-	80,000
Engineering/Design	120,000	-	-	120,000	-	-	-	-	120,000
Construction	650,000	-	-	-	650,000	-	-	-	650,000
Professional Services	50,000	-	-	-	50,000	-	-	-	50,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	900,000	-	-	200,000	700,000	-	-	-	900,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance/Electricity	-	-	1,000	1,200	1,400	1,600	5,200

**Additional Information/Questions:**

- Warrant analysis was conducted at the request of the Town Council. Based on the data collected, a traffic signal was needed.

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**Capital Improvement Program**

**Governmental Funds**

**TITLE:** A Street Trail from BRMS to Maple

**STATUS:** Future

**PROJECT RANKING:** 5

**PROGRAM DESCRIPTION:** Design and construction of a sidewalk/multipurpose trail along A Street from Blue Ridge Middle School to Maple Avenue. Letter has been sent to Loudoun County requesting funding for this project.

GFOA has suggested that using a picture instead of a map makes the presentation more inviting to the reader.

**OPERATING IMPACT:** Minimal increase in sidewalk maintenance expenditures.

**GOAL ADDRESSED:** 2009 Town-wide Transportation Plan

- Ensure Transportation Safety and Security by creating safe routes to school for non-vehicular users

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion

**Capital Improvement Program**

**Governmental Funds**

**TITLE:** A Street Trail from BRMS to Maple

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
County Funding	875,000	-	-	875,000	-	-	-	-	875,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	875,000	-	-	875,000	-	-	-	-	875,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	-	-	-	-	-	-	-	-	-
Construction	875,000	-	-	875,000	-	-	-	-	875,000
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	875,000	-	-	875,000	-	-	-	-	875,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Sidewalk Maintenance	-	-	-	-	-	-	-

# **Future Projects**

**Governmental Funds**

<b>Project Name</b>	<b>Project Summary</b>	<b>Estimated Cost</b>
E Street Sidewalk-Drainage	This project will provide a pedestrian linkage along East E Street to the business district located along Main and Maple by connecting to the sidewalk along 14th Street and 12th Street. The construction of this project will also address drainage issues that exist along both the north and south sides of East E Street, and at the intersection of East E Street with South 20th Street. The deep ditch along the south side of E Street presents maintenance challenges for both homeowners and the Town. The Town may reapply for CDBG funding for this project.	\$772,000

# **Water Fund Projects**

**Capital Improvement Program**

**Water Fund**

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	394,000	-	394,000	-	-	-	-	-	-
Bonds-Cardinal (12)	476,807	354,166	122,641	-	-	-	-	-	-
Bonds-SunTrust (08)	18,210	18,210	-	-	-	-	-	-	-
	889,017	372,376	516,641	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Tank Painting	300,000	-	300,000	-	-	-	-	-	-
Water Line Replacement on N 21st Street	118,978	118,978	-	-	-	-	-	-	-
Main St. Well Electrical Improvements	218,039	218,039	-	-	-	-	-	-	-
Reprogram PLC at Wells	150,000	-	150,000	-	-	-	-	-	-
Hirst Wells Rehabilitation	102,000	35,359	66,641	-	-	-	-	-	-
	889,017	372,376	516,641	-	-	-	-	-	-

# Completed Projects

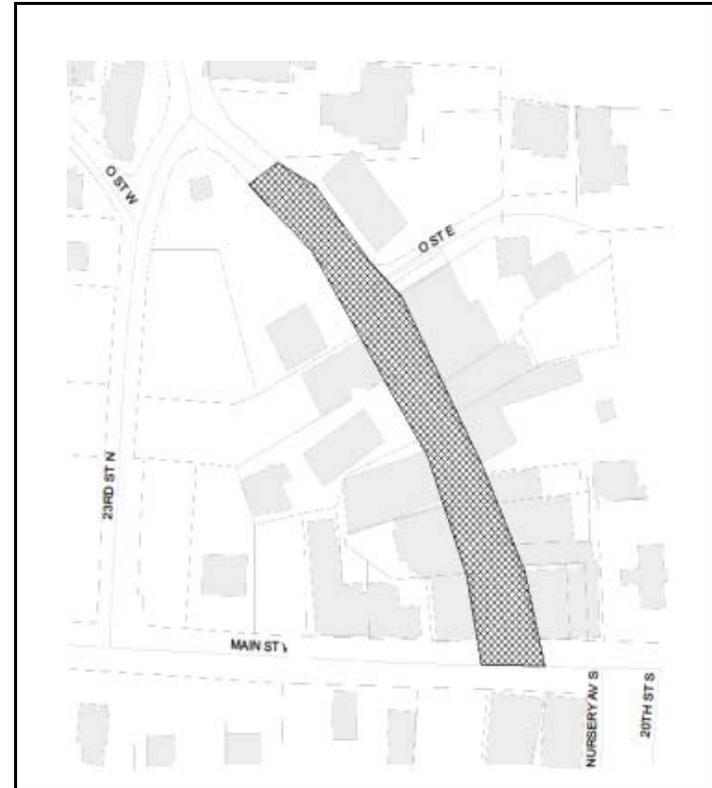
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**TITLE:** Water Line Replacement on N 21st Street (599-4094526)

**STATUS:** Complete

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** This project is complete. Waterline work to take place includes the abandonment of aging 8" cast iron pipe located on the west side of N. 21st Street between Main Street and N. 23rd Street and also includes relocating water services from the old line to the existing 12" newer ductile iron water main on the east side of the roadway. Work also includes a vertical adjustment of a small section of the 12" water main to allow the installation of storm sewer. Work to be done in conjunction with the Downtown Enhancements Phase 2 project (119-4094100-0602)



**OPERATING IMPACT:** Reduction in costs associated with waterline breaks.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
	March 2015	November 2015

**Capital Improvement Program**

**Water Fund**

**TITLE:** Water Line Replacement on N 21st Street (599-4094526)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Bonds-Cardinal (12)	118,978	118,978	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	118,978	118,978	-	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	-	-	-	-	-	-	-	-	-
Construction	118,978	118,978	-	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	118,978	118,978	-	-	-	-	-	-	-

**Operating Impact**

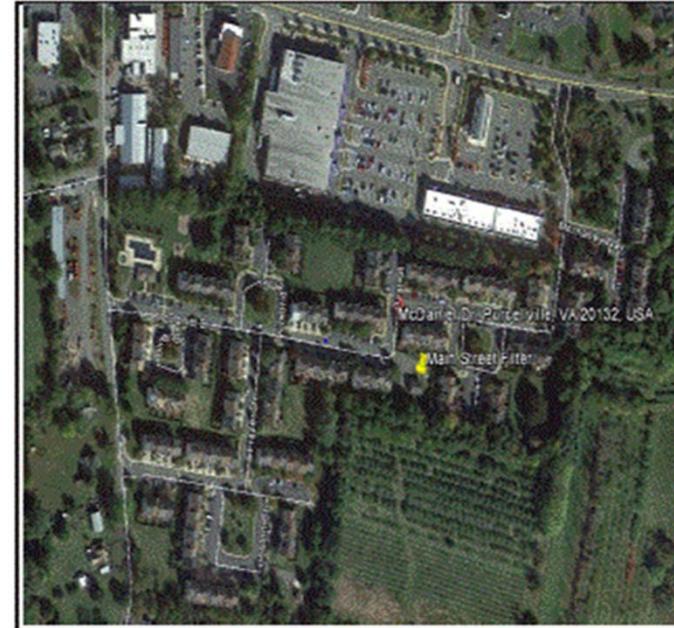
Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	200	200	200	200	200	1,000

**TITLE:** Main St. Well Electrical Improvements (599-4094530)

**STATUS:** Complete

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** The existing electrical equipment is in need of replacement and will require to be brought up to code. Currently there is no back up power for the main street well treatment facilities. This project will make the necessary electrical improvements while providing back up generation to the facilities.



**OPERATING IMPACT:** Will provide emergency power and reliability of the water supply to our customers.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2015	2015	2015

**Capital Improvement Program**

**Water Fund**

**TITLE:** Main St. Well Electrical Improvements (599-4094530)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Bonds-SunTrust (08)	18,210	18,210	-	-	-	-	-	-	-
Bonds-Cardinal (12)	199,829	199,829	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	218,039	218,039	-	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	21,788	21,788	-	-	-	-	-	-	-
Construction	196,251	196,251	-	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	218,039	218,039	-	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Fuel/Maintenance	1,000	1,000	1,000	1,000	1,000	1,000	5,000

# Ongoing Projects

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**TITLE:** Tank Painting (599-4094524)

**STATUS:** Ongoing

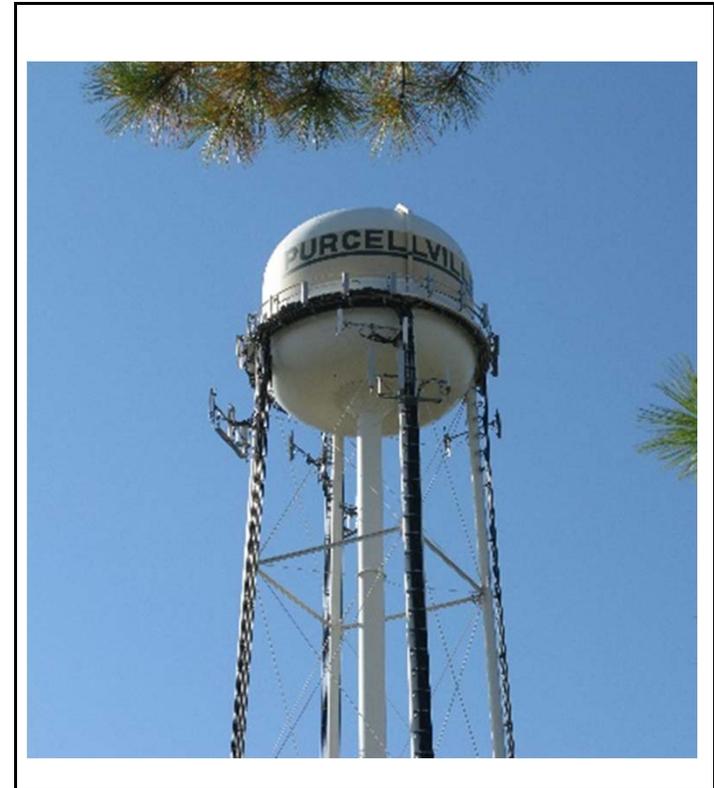
**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** The elevated storage tank requires repainting every 10-15 years. The last time the tank received an overcoat was in 2000. An assessment conducted in 2012 recommended that the tank be stripped and painted in the next two years do to the failure of the existing paint over lay which is peeling and chipping. This condition has resulted in significant rust spots due to exposure to the elements. Since this facility is one of the most important resources for water quality and fire supression as well as a very productive revenue generators due to the cell lease agreements, it is paramount to keep the facility in sound condition.

**OPERATING IMPACT:** A preventative maintenance program will add cost but extend the useful life of the facility.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2017	2017	2017

**Capital Improvement Program**

**Water Fund**

**TITLE:** Tank Painting (599-4094524)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	300,000	-	300,000	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	300,000	-	300,000	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	30,000	-	30,000	-	-	-	-	-	-
Construction	245,000	-	245,000	-	-	-	-	-	-
Professional Services	25,000	-	25,000	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	300,000	-	300,000	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Preventative Maintenance Program	-	2,000	2,000	2,000	2,000	2,000	10,000

**TITLE:** Reprogram PLC at Wells (599-4094531)

**STATUS:** Ongoing

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** The Program Logistic Controllers provide essential automated controls that allow our wells to run up to 24 hours a day without the need to have staff on site. The existing PLC in most of the wells are over 20 years old and the manufacturer no longer provides service or parts for this older units.

**OPERATING IMPACT:** brief comment here. \$ amount on second page

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion

**Capital Improvement Program**

**Water Fund**

**TITLE:** Reprogram PLC at Wells (599-4094531)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	94,000	-	94,000	-	-	-	-	-	-
Bonds-Cardinal (12)	56,000	-	56,000	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	150,000	-	150,000	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Professional Services	150,000	-	150,000	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	150,000	-	150,000	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Annual Maintenance	-	1,000	1,000	1,000	1,000	1,000	5,000

**TITLE:** Hirst Wells Rehabilitation (599-4094535)

**STATUS:** Ongoing

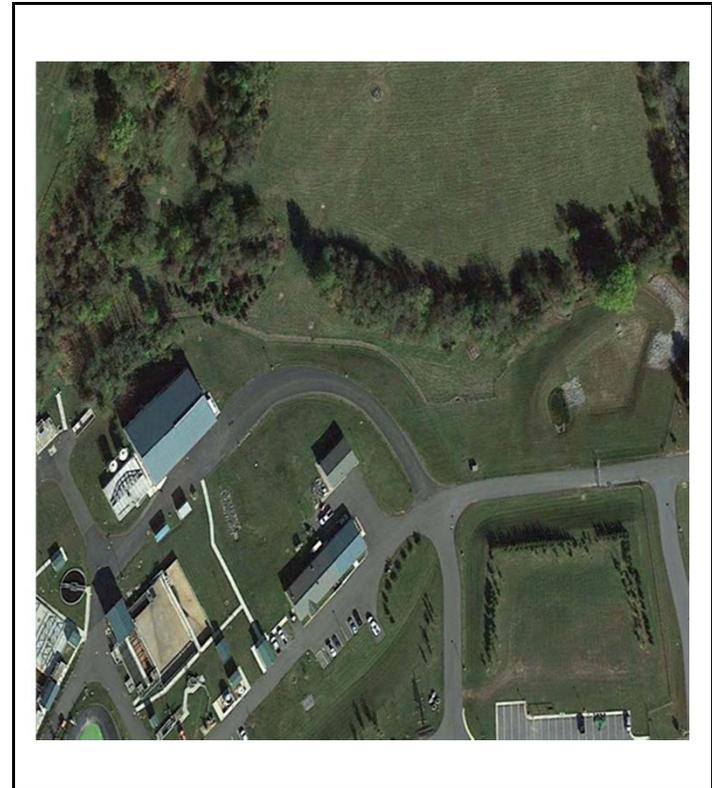
**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** Work includes re-opening water production zones that are plugged, modifying well to seal off zones interpreted to contribute surface water to the impacted well. This allows for recovery of capacity lost over the years and provides an opportunity for elimination of surface water infiltration if associated with the grouting seal. Also enhanced monitoring will be installed to reduce the vulnerability associated with chemicals not feeding properly. Staff has received estimates for placing membrane filters on site in the event the rehabilitation work is unsuccessful.

**OPERATING IMPACT:** Depends on the outcome of the rehab of the well.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2016	2016	2017

**Capital Improvement Program**

**Water Fund**

**TITLE:** Hirst Wells Rehabilitation (599-4094535)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Bonds-Cardinal (12)	102,000	35,359	66,641	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	102,000	35,359	66,641	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	17,000	8,631	8,369	-	-	-	-	-	-
Construction	75,000	26,728	48,272	-	-	-	-	-	-
Professional Services	10,000	-	10,000	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	102,000	35,359	66,641	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	-	-	-	-	-

# **5-Year Priority Projects**

**Capital Improvement Program**

**5 Year Priority Projects**

**Water Fund**

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	6,860,096	1,014	-	752,900	1,622,562	1,483,620	3,000,000	-	6,859,082
Cash	50,000	-	-	50,000	-	-	-	-	50,000
Bonds-SunTrust (08)	61,509	61,509	-	-	-	-	-	-	-
	6,971,605	62,523	-	802,900	1,622,562	1,483,620	3,000,000	-	6,909,082

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
New Elevated Water Tank	95,000	-	-	-	-	95,000	-	-	95,000
Water Treatment Plant Improvements	1,207,500	-	-	50,000	672,500	485,000	-	-	1,207,500
Intake Structure for Hirst Reservoir	706,500	-	-	-	143,000	563,500	-	-	706,500
N Maple Avenue Waterline	790,423	62,523	-	727,900	-	-	-	-	727,900
Consolidated Well Treatment Facility	3,050,000	-	-	-	-	50,000	3,000,000	-	3,050,000
Holly Lane Water Main Replacement	175,000	-	-	-	175,000	-	-	-	175,000
Allder School Road Water Main Replacement	375,000	-	-	25,000	350,000	-	-	-	375,000
LVSC Water Main Replacement	218,000	-	-	-	218,000	-	-	-	218,000
12th Street Water Main Replacement	354,182	-	-	-	64,062	290,120	-	-	354,182
	6,971,605	62,523	-	802,900	1,622,562	1,483,620	3,000,000	-	6,909,082

**Water Fund**

Project Name	Project Summary	Estimated Cost	Status
Intake Structure for Hirst Reservoir	<p>The Hirst Reservoir was constructed with a multi-level intake structure to allow operators to withdraw water from different levels in the reservoir. This ability gave operators the flexibility to withdraw water with the best quality (least affected by algae or turbidity). Several years ago, the dock leading to the intake structure and the top of the structure became structurally unstable, collapsed and the dock and the top portion of the pipe fell to the bottom of the reservoir. Currently, a simple mesh screen is installed at the top of the intake pipe. Water is always withdrawn from the top portion of the intake; several of the gates and valves in the structure are considered inoperable. Additionally, the sluice gate that would allow operators to remove sediment from the bottom of the reservoir has not been operated for many years and is considered inoperable. This has allowed sediment laden with algae to build up in the reservoir, which further affects the water quality. This project involves the design and installation of a new intake structure and sluice gate to replace the broken and inoperable structures to allow operators to properly manage the reservoir and maximize water quality.</p>	\$706,500	Awaiting Funding

**Water Fund**

Project Name	Project Summary	Estimated Cost	Status
Allder School Road Water Main Replacement	Identified in the water capital improvement plan by A&H Environmental Consultants, this project would replace the existing water line to improve service and reduce the possibility of a water main break. Staff has received frequent complaints from customers that the water pressure is low. Since the VDOT intends to conduct improvements to Allder School Road, timing of this project is critical. Staff has developed a cost estimate to conduct the work using Town resources which would result in a cost savings.	\$375,000	Awaiting Funding
North Maple Avenue Waterline	This project entails replacing approximately 2000 ft. of 8- inch ductile iron water main along N. Maple Avenue from E. Main Street northward to the north-west end of Loudoun Valley High School just south of the W & OD trail. Over the past decade, there have been several breaks along the existing segment of the waterline on N. Maple Avenue. The new 8-inch line and interconnections will provide service reliability to the Town's customers. This project was identified in the 2010 Water Distribution System CIP Plan.	\$790,423	Awaiting Funding
Holly Lane Water Main Replacement	Identified in the water capital improvement plan by A&H Environmental Consultants, this project would replace the existing water line to improve service and reduce the possibility of a water main break. This project would enhance fire protection in this area.	\$175,000	Awaiting Funding

**Water Fund**

Project Name	Project Summary	Estimated Cost	Status
Consolidated Well Treatment Facility	<p>This project involves the construction of a well filter building to provide treatment to the Short Hill wells. This project will involve approval from both the Virginia Department of Health and Loudoun County's Department of Building &amp; Development. The design of the facilities has been complete. Originally, the construction component of this project was covered under the Short Term Water Investments. A decision will need to be made if the scope of this project will expand to include a separate train for surface water treatment to realize a cost savings on construction services and in addition to reduce the need to invest in the CIP Water Treatment Plant Improvements (599-4094521). May be beneficial for the project to be completed before the Water Treatment Plant Improvements. This would supply additional capacity while construction is occurring at the Water Plant.</p>	\$3,050,000	Awaiting Funding
LVSC Water Main Replacement	<p>Identified in the water capital improvement plan by A&amp;H Environmental Consultants, this project would replace the existing water line to improve service and reduce the possibility of a water main break.</p>	\$218,000	Awaiting Funding

**Water Fund**

Project Name	Project Summary	Estimated Cost	Status
Water Treatment Plant Improvements	This project involves the design and construction of an expansion to the existing WTP or a new WTP facility to address expected additional water to be treated and update an aging facility. The WTP is more than 30 years old and does not provide any flexibility to address new treatment requirements from EPA. A current WTP evaluation was conducted and the report determined that significant upgrades would be required. This will allow us to extend the useful life of the facilities as	\$2,365,000	Awaiting Funding
12th Street Water Main Replacement	This project will occur concominantly with street and drainage improvements associated with the 12th Street GF CIP project. The project will consist of replacing the existing 4-inch water main between Main Street and G Street with a new 6-inch DIP. The replacement of the waterline was identified in the 2010 Water Distribution System CIP plan.	\$354,182	Awaiting Funding
New Elevated Water Tank	This project involves the sizing, siting and construction of an additional finished water storage tank for the water distribution system. The Virginia Department of Health requires that the Town maintain a certain level of water storage. The initial Water Tank Siting Study has identified that there is a need for an additional 500,000 gallons of finished storage capacity. The next step in the study will be to utilize the new model developed in the Water Distribution Study to further evaluate the sites discussed in the 2008 Tank Siting Study. The design and construction phase would be scheduled in 2023 & 2024.	\$95,000 Evaluation of sites only. Construction costs have not been estimated.	Awaiting Funding

Draft detail sheets are available for some projects. In the proposed budget document, detail sheets will not be included for a project until it is approved by Council to move forward.

**TITLE:** Intake Structure for Hirst Reservoir (599-4094523)

**STATUS:** Future

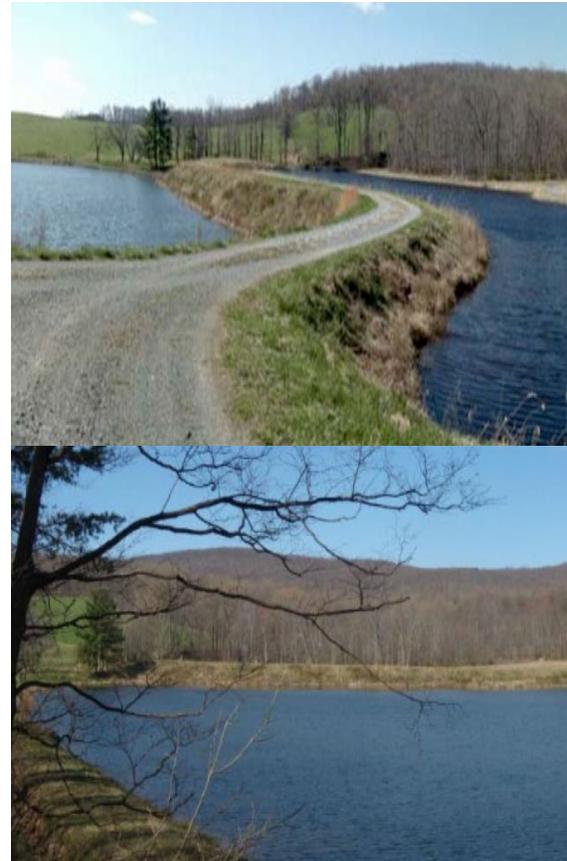
**PROJECT RANKING:** 1

**PROGRAM DESCRIPTION:** The Hirst Reservoir was constructed with a multi-level intake structure to allow operators to withdraw water from different levels in the reservoir. This ability gave operators the flexibility to withdraw water with the best quality (least affected by algae or turbidity). Several years ago, the dock leading to the intake structure and the top of the structure became structurally unstable, collapsed and the dock and the top portion of the pipe fell to the bottom of the reservoir. Currently, a simple mesh screen is installed at the top of the intake pipe. Water is always withdrawn from the top portion of the intake; several of the gates and valves in the structure are considered inoperable. Additionally, the sluice gate that would allow operators to remove sediment from the bottom of the reservoir has not been operated for many years and is considered inoperable. This has allowed sediment laden with algae to build up in the reservoir, which further affects the water quality. This project involves the design and installation of a new intake structure and sluice gate to replace the broken and inoperable structures to allow operators to properly manage the reservoir and maximize water quality.

**OPERATING IMPACT:** No increase in operating costs. Would allow operators the flexibility to withdraw water at various levels to maximize water quality, which could decrease costs for chemicals needed to control taste and odor issues.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2019	2020	2020

**Capital Improvement Program**

**Water Fund**

**TITLE:** Intake Structure for Hirst Reservoir (599-4094523)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	706,500	-	-	-	143,000	563,500	-	-	706,500
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	706,500	-	-	-	143,000	563,500	-	-	706,500

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	143,000	-	-	-	143,000	-	-	-	143,000
Construction	563,500	-	-	-	-	563,500	-	-	563,500
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	706,500	-	-	-	143,000	563,500	-	-	706,500

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	-	-	500	500	1,000

**Additional Information/Questions:**

- Virginia Waterworks regulations (12VAC-690-830.C.1) require that:  
"Intake structures shall provide for"
  1. Withdrawal of water from at least three levels in impoundments or reservoirs.
  2. Separate facilities for release of less desirable water held in storage.
  3. Screens on intake ports with provisions for adequate cleaning.
  
- The original design met the above requirements and staff recommends that the structure should be restored to its original condition to provide the operators with the reservoir and raw water quality management tools that are needed and required.
  
- The Virginia Department of Health Office of Drinking Water Sanitary Survey Reports from September 2014, 2015, and 2016 all include note that "There is no provision to access, inspect, or clean the intake and screen from the surface. Further, the current intake does not allow the Town to withdraw water from different levels in the reservoir that might yield more favorable
- raw water."

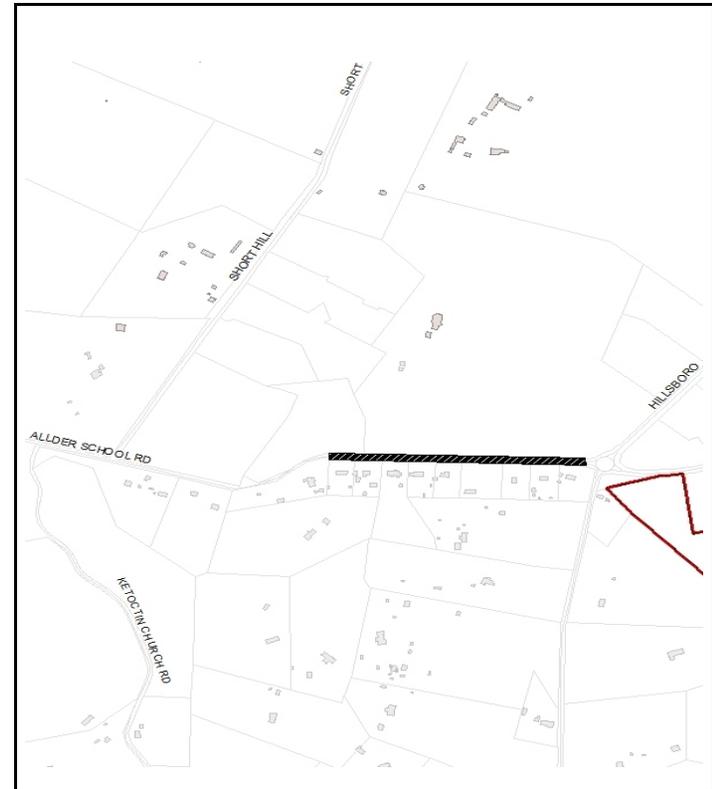
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**TITLE:** Allder School Road Water Main Replacement (599-4094533)

**STATUS:** Future

**PROJECT RANKING:** 2

**PROGRAM DESCRIPTION:** Identified in the water capital improvement plan by A&H Environmental Consultants, this project would replace the existing water line to improve service and reduce the possibility of a water main break. Staff has received frequent complaints from customers that the water pressure is low. Since the VDOT intends to conduct improvements to Allder School Road, timing of this project is critical. Staff has developed a cost estimate to conduct the work using Town resources which would result in a cost savings.



**OPERATING IMPACT:** Reduce costs associated with breaks in the waterline.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2017	2017	2017

**Capital Improvement Program**

**Water Fund**

**TITLE:** Allder School Road Water Main Replacement (599-4094533)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	375,000	-	-	25,000	350,000	-	-	-	375,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	375,000	-	-	25,000	350,000	-	-	-	375,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	40,000	-	-	25,000	15,000	-	-	-	40,000
Construction	325,000	-	-	-	325,000	-	-	-	325,000
Professional Services	10,000	-	-	-	10,000	-	-	-	10,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	375,000	-	-	25,000	350,000	-	-	-	375,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	500	500	500	500	2,000

**Additional Information/Questions:**

- The Town serves nine out-of-town residents along Alder School Road through easement agreements dating back to the 1950s and 60s. This pipe is currently undersized, aging, and requires ongoing maintenance.
- Customer complaints have increased, specifically of low pressure.
- The County will be paving this section of Alder School Road in the future (estimated completion in 2019). Staff believes that completing the replacement of this water main prior to the road work will be more cost effective than afterwards.
- In addition, staff believes that it can conduct the replacement in-house with Maintenance Staff, which could reduce the cost of the project from an estimated \$375,000 to \$150,000.
- No funding has been identified. Staff recommends Fund Balance from the Water Fund.

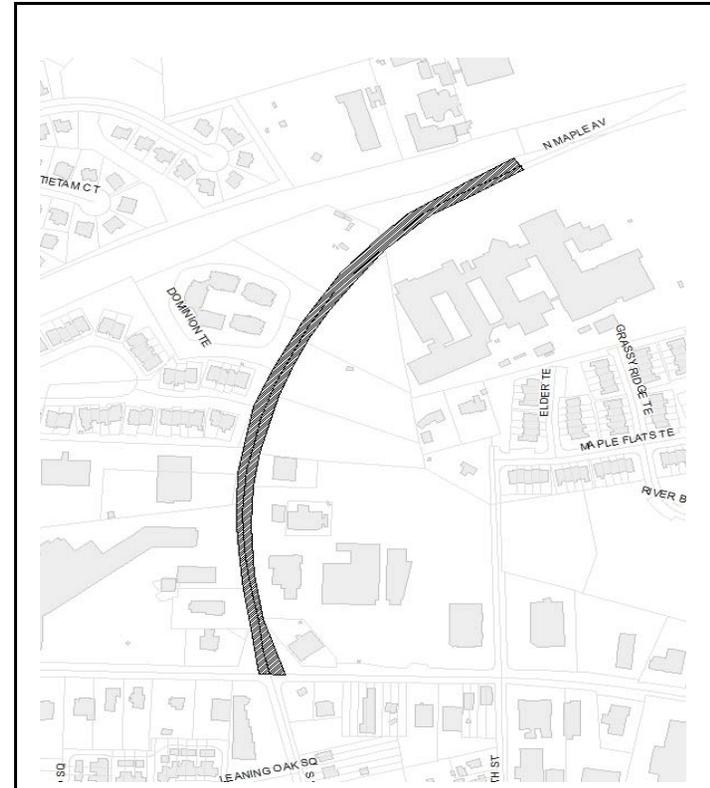
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**TITLE:** N Maple Avenue Waterline (599-4094527)

**STATUS:** Future

**PROJECT RANKING:** 3

**PROGRAM DESCRIPTION:** This project entails replacing approximately 2000 ft. of 8- inch ductile iron water main along N. Maple Avenue from E. Main Street northward to the north-west end of Loudoun Valley High School just south of the W & OD trail. Over the past decade, there have been several breaks along the existing segment of the waterline on N. Maple Avenue. The new 8-inch line and interconnections will provide service reliability to the Town's customers. This project was identified in the 2010 Water Distribution System CIP Plan.



**OPERATING IMPACT:** Reduce costs associated with breaks in the waterline.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2018	2018	2018

**Capital Improvement Program**

**Water Fund**

**TITLE:** N Maple Avenue Waterline (599-4094527)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	728,914	1,014	-	727,900	-	-	-	-	727,900
Bonds-SunTrust (08)	61,509	61,509	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	790,423	62,523	-	727,900	-	-	-	-	727,900

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	75,881	60,881	-	15,000	-	-	-	-	15,000
Construction	705,500	-	-	705,500	-	-	-	-	705,500
Professional Services	9,042	1,642	-	7,400	-	-	-	-	7,400
Miscellaneous	-	-	-	-	-	-	-	-	-
	790,423	62,523	-	727,900	-	-	-	-	727,900

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	500	500	500	500	2,000

**Additional Information/Questions:**

- Numerous leaks and repairs have been made to this waterline.

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**TITLE:** Holly Lane Water Main Replacement (599-4094532)

**STATUS:** Future

**PROJECT RANKING:** 4

**PROGRAM DESCRIPTION:** Identified in the water capital improvement plan by A&H Environmental Consultants, this project would replace the existing water line to improve service and reduce the possibility of a water main break. This project would enhance fire protection in this area.



**OPERATING IMPACT:** Reduce costs associated with breaks in the waterline.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2019	2019	2019

**Capital Improvement Program**

**Water Fund**

**TITLE:** Holly Lane Water Main Replacement (599-4094532)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	175,000	-	-	-	175,000	-	-	-	175,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	175,000	-	-	-	175,000	-	-	-	175,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	20,000	-	-	-	20,000	-	-	-	20,000
Construction	150,000	-	-	-	150,000	-	-	-	150,000
Professional Services	5,000	-	-	-	5,000	-	-	-	5,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	175,000	-	-	-	175,000	-	-	-	175,000

**Operating Impact**

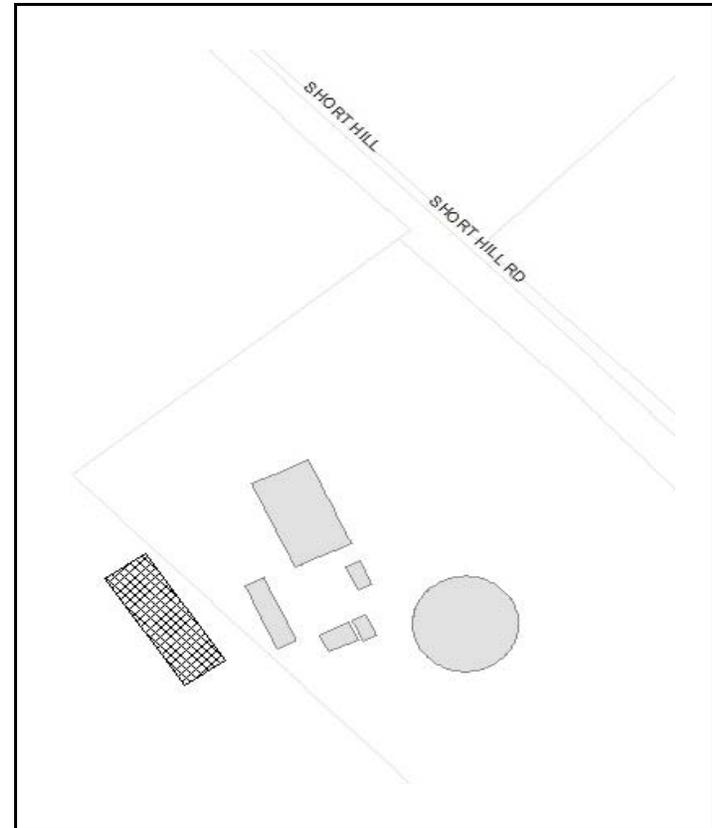
Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	-	500	500	500	1,500

**TITLE:** Consolidated Well Treatment Facility (599-4094529)

**STATUS:** Future

**PROJECT RANKING:** 5

**PROGRAM DESCRIPTION:** This project involves the construction of a well filter building to provide treatment to the Short Hill wells. This project will involve approval from both the Virginia Department of Health and Loudoun County's Department of Building & Development. The design of the facilities has been complete. Originally, the construction component of this project was covered under the Short Term Water Investments. A decision will need to be made if the scope of this project will expand to include a separate train for surface water treatment to realize a cost savings on construction services and in addition to reduce the need to invest in the CIP Water Treatment Plant Improvements (599-4094521). May be beneficial for the project to be completed before the Water Treatment Plant Improvements. This would supply additional capacity while construction is occurring at the Water Plant.



**OPERATING IMPACT:** New preventative maintenance program will need to be developed.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2020	2021	2021

**Capital Improvement Program**

**Water Fund**

**TITLE:** Consolidated Well Treatment Facility (599-4094529)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	3,050,000	-	-	-	-	50,000	3,000,000	-	3,050,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	3,050,000	-	-	-	-	50,000	3,000,000	-	3,050,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	75,000	-	-	-	-	50,000	25,000	-	75,000
Construction	2,898,000	-	-	-	-	-	2,898,000	-	2,898,000
Professional Services	77,000	-	-	-	-	-	77,000	-	77,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	3,050,000	-	-	-	-	50,000	3,000,000	-	3,050,000

**Operating Impact**

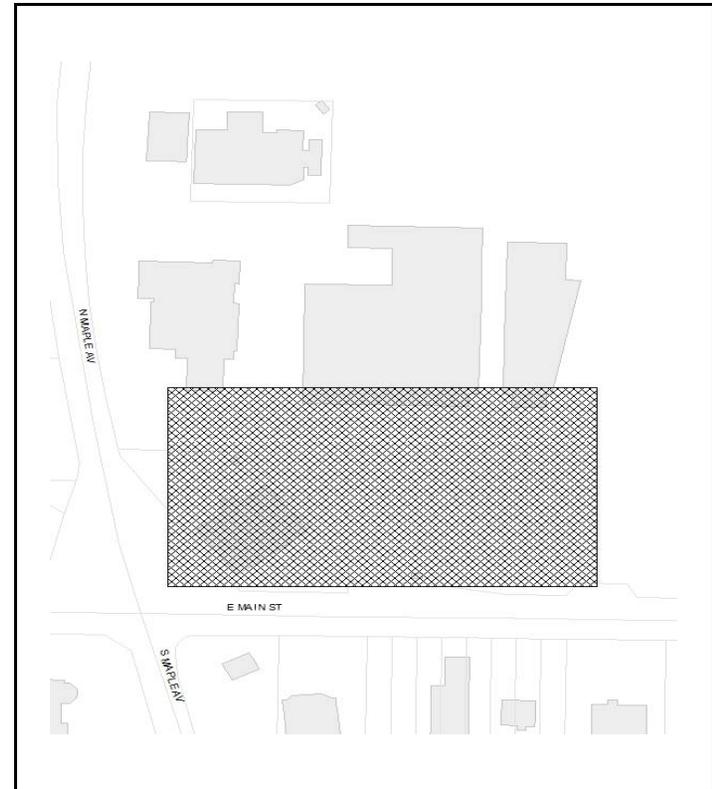
Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	-	-	8,000	8,000	16,000

**TITLE:** LVSC Water Main Replacement (599-4094534)

**STATUS:** Future

**PROJECT RANKING:** 6

**PROGRAM DESCRIPTION:** Identified in the water capital improvement plan by A&H Environmental Consultants, this project would replace the existing water line to improve service and reduce the possibility of a water main break.



**OPERATING IMPACT:** Reduce costs associated with breaks in the waterline.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2019	2019	2019

**Capital Improvement Program**

**Water Fund**

**TITLE:** LVSC Water Main Replacement (599-4094534)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	218,000	-	-	-	218,000	-	-	-	218,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	218,000	-	-	-	218,000	-	-	-	218,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	30,000	-	-	-	30,000	-	-	-	30,000
Construction	148,000	-	-	-	148,000	-	-	-	148,000
Professional Services	40,000	-	-	-	40,000	-	-	-	40,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	218,000	-	-	-	218,000	-	-	-	218,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	-	500	500	500	1,500

**TITLE:** Water Treatment Plant Improvements (599-4094521)

**STATUS:** Future

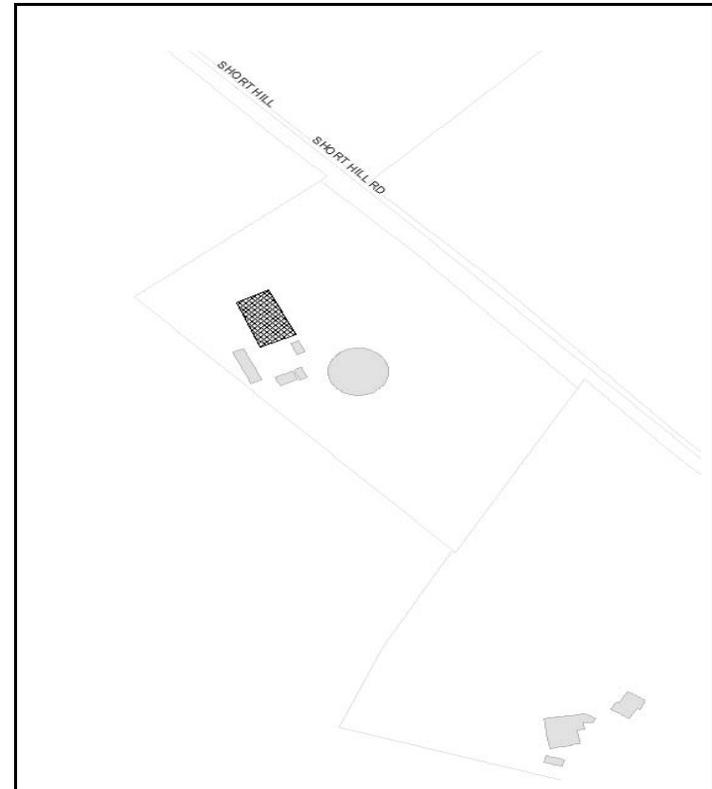
**PROJECT RANKING:** 7

**PROGRAM DESCRIPTION:** This project involves the design and construction of an expansion to the existing WTP or a new WTP facility to address expected additional water to be treated and update an aging facility. The WTP is more than 30 years old and does not provide any flexibility to address new treatment requirements from EPA. A current WTP evaluation was conducted and the report determined that significant upgrades would be required. This will allow us to extend the useful life of the facilities as well.

**OPERATING IMPACT:** The new facility or upgrades will reduce the cost associated with repairs but may increase preventative maintenance costs which will prolong the life span of the facility.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2018	2019	2020

**Capital Improvement Program**

**Water Fund**

**TITLE:** Water Treatment Plant Improvements (599-4094521)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	1,207,500	-	-	50,000	672,500	485,000	-	-	1,207,500
Unidentified	1,157,500	-	-	-	672,500	485,000	-	-	1,157,500
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	2,365,000	-	-	50,000	1,345,000	970,000	-	-	2,365,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	170,000	-	-	50,000	30,000	90,000	-	-	170,000
Construction	987,500	-	-	-	617,500	370,000	-	-	987,500
Professional Services	50,000	-	-	-	25,000	25,000	-	-	50,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	1,207,500	-	-	50,000	672,500	485,000	-	-	1,207,500

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	-	-	11,000	11,000	22,000

**Additional Information/Questions:**

- 2006 RK& K Engineering Assessment of the Water Treatment Facility indicated several improvements that were needed.

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**TITLE:** 12th Street Water Main Replacement (599-4094536)

**STATUS:** Future

**PROJECT RANKING:** 8

**PROGRAM DESCRIPTION:** This project will occur concomitantly with street and drainage improvements associated with the 12th Street GF CIP project. The project will consist of replacing the existing 4-inch water main between Main Street and G Street with a new 6-inch DIP. The replacement of the waterline was identified in the 2010 Water Distribution System CIP plan.

**OPERATING IMPACT:** Improvement to water quality and reduce potential for a waterline break due to age of the pipe.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.
- Public Services - Purcellville will provide its citizens with the highest quality public services and facilities to effectively and equitably meet the public needs.



**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2017	2019	2020

**Capital Improvement Program**

**Water Fund**

**TITLE:** 12th Street Water Main Replacement (599-4094536)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	354,182	-	-	-	64,062	290,120	-	-	354,182
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	354,182	-	-	-	64,062	290,120	-	-	354,182

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	64,062	-	-	-	64,062	-	-	-	64,062
Construction	290,120	-	-	-	-	290,120	-	-	290,120
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	354,182	-	-	-	64,062	290,120	-	-	354,182

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	-	-	500	500	1,000

**Additional Information/Questions:**

- This is a joint General Fund and Water Fund Project meant to address drainage and stormwater issues, transportation safety issues, pedestrian access and safety, asphalt failures, and utility issues (replace aging water main).
- Council previously considered a number of options, from minimal scope to full-scope.
- The Council has requested a VDOT Revenue Sharing Grant and anticipates receipt of that in order to continue with the project.
- Coordinating the water main replacement with the road work will result in cost and time savings over doing the projects separately.
- No funding source has been identified. If this remains a Council priority, using Fund Balance would serve as a match to the VDOT Grant (if received) and could allow the project to proceed.

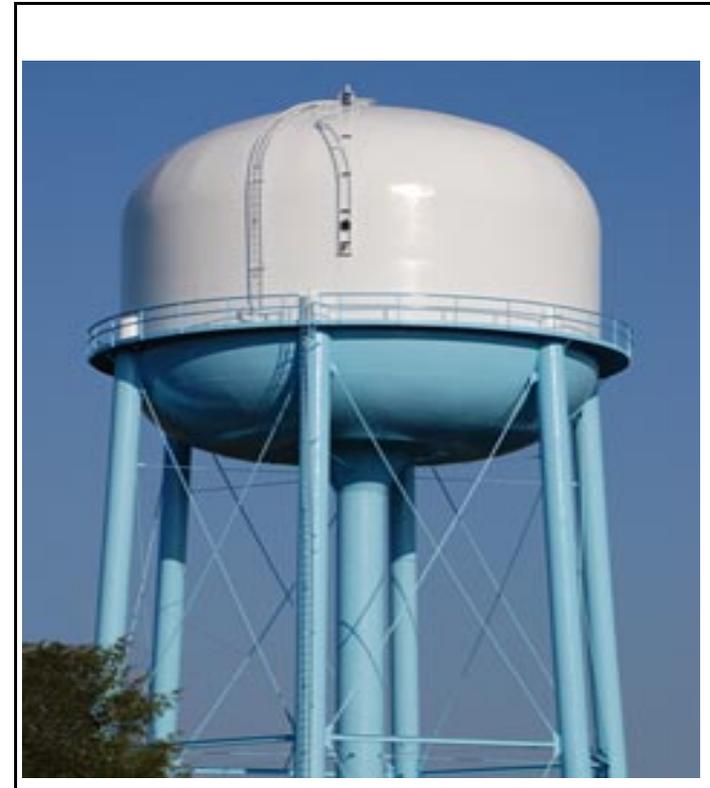
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**TITLE:** New Elevated Water Tank (599-4094515)

**STATUS:** Future

**PROJECT RANKING:** 9

**PROGRAM DESCRIPTION:** This project involves the sizing, siting and construction of an additional finished water storage tank for the water distribution system. The Virginia Department of Health requires that the Town maintain a certain level of water storage. The initial Water Tank Siting Study has identified that there is a need for an additional 500,000 gallons of finished storage capacity. The next step in the study will be to utilize the new model developed in the Water Distribution Study to further evaluate the sites discussed in the 2008 Tank Siting Study. The design and construction phase would be scheduled in 2023 & 2024.



**OPERATING IMPACT:** Would require a preventative maintenance program and painting every 10 years. Cost could be offset by cell antenna lease revenue.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2020-2022	2023	2024

**Capital Improvement Program**

**Water Fund**

**TITLE:** New Elevated Water Tank (599-4094515)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	95,000	-	-	-	-	95,000	-	-	95,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	95,000	-	-	-	-	95,000	-	-	95,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	5,000	-	-	-	-	5,000	-	-	5,000
Engineering/Design	85,000	-	-	-	-	85,000	-	-	85,000
Construction	-	-	-	-	-	-	-	-	-
Professional Services	5,000	-	-	-	-	5,000	-	-	5,000
Miscellaneous	-	-	-	-	-	-	-	-	-
	95,000	-	-	-	-	95,000	-	-	95,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Maintenance	-	-	-	-	-	-	-

**Additional Information/Questions:**

- Need driven by water demand, quality and VDH regulatory requirements.
  
- Original Tank Siting study conducted in 2008.

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# **Future Projects**

**Water Fund**

Project Name	Project Summary	Estimated Cost (2010 \$\$)
A Street Water Line Loop	This project involves the design, easement acquisition and installation of a water line loop from Gardner Meadows to a water line at the Blue Ridge Middle School (BRMS). During a series of water line breaks on 20th Street, it was determined that a water loop would have permitted many residents to retain water supply while the 20th Street line was taken out of service for repairs. It is expected that completion of the Water Distribution System Evaluation model will help identify the best hydraulic location for the line and the possible placement of a water tank at the BRMS.	\$107,000
New Elevated Water Tank	This project involves the sizing, siting and construction of an additional finished water storage tank for the water distribution system. The Virginia Department of Health requires that the Town maintain a certain level of water storage. The initial Water Tank Siting Study has identified that there is a need for an additional 500,000 gallons of finished storage capacity. The next step in the study will be to utilize the new model developed in the Water Distribution Study to further evaluate the sites discussed in the Tank Siting Study.	\$2,515,000
21st Street Water Main Replacement	This project includes the replacement of the existing 12-inch diameter water main from the water treatment plant and million gallon storage tank on Short Hill Road to just south of Baffin Place. The 12-inch main was installed in 1960, and is believed to be cast iron pipe. The 12-inch main is especially critical to Purcellville's water distribution system, as it is the main supply line from the water treatment plant. This project was recommended for completion for the years 2015 - 2019 in the "Water Distribution System Capital Improvements Plan", October 2010.	\$3,680,000

**Water Fund**

Project Name	Project Summary	Estimated Cost (2010 \$\$)
G Street Water Main Replacement	This project involves the replacement of the existing 4-inch and 6-inch water main along G Street, from South Maple Avenue to S. 20th Street. This project was recommended for completion for the years 2015 - 2019 in the "Water Distribution System Capital Improvements Plan", October 2010, due to the advancing age of the pipe and to improve fire flow capabilities in the area.	\$596,000
E Street Water Main Replacement	This project involves the replacement of the existing 6-inch water main that was installed in the 1960's. This project was recommended for completion for the years 2015 - 2019 in the "Water Distribution System Capital Improvements Plan", October 2010, due to the advancing age of the pipe.	\$286,000
O Street Water Main Replacement	This project involves the replacement of the existing 4-inch diameter water main. This project was recommended for completion for the years 2015 - 2019 in the "Water Distribution System Capital Improvements Plan", October 2010, due to the advancing age of the pipe and to improve fire flow capabilities in the area.	\$41,000
F Street Water Main Replacement	This project involves the replacement of the existing 4-inch diameter water main and to extend the dead end main from F Street to S. 20th Street. This project was recommended for completion for the years 2015 - 2019 in the "Water Distribution System Capital Improvements Plan", October 2010, due to the advancing age of the pipe, to improve fire flow capabilities in the area, and to improve water quality.	\$269,000

**Water Fund**

Project Name	Project Summary	Estimated Cost (2010 \$\$)
Springsbury Drive Water Main Extension	This project involves the extension of the 8-inch water main in Springsbury Drive to the existing water main at the intersection of A Street and Eliot Drive. This project was recommended for completion for the years 2015 - 2019 in the "Water Distribution System Capital Improvements Plan", October 2010, in order to improve fire flow capabilities in the area.	\$138,000
Rugby Court Water Main Extension	This project involves the extension of the 8-inch water main in Rugby Court with a 6-inch main, to the existing water main serving Emerick Elementary School. This project was recommended for completion for the years 2015 - 2019 in the "Water Distribution System Capital Improvements Plan", October 2010, in order to improve fire flow capabilities in the area and for improved water quality.	\$95,000

# **Wastewater Funds Projects**

**Capital Improvement Program**

**Wastewater Fund**

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	200,000	-	200,000	-	-	-	-	-	-
	200,000	-	200,000	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
East End Pump Station	200,000	-	200,000	-	-	-	-	-	-
	200,000	-	200,000	-	-	-	-	-	-

# Ongoing Projects

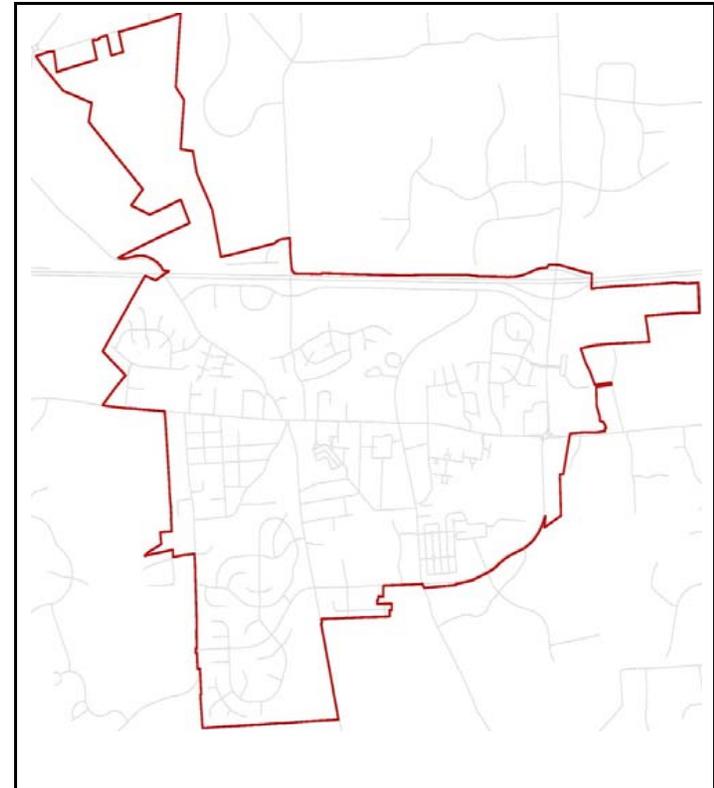
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**TITLE:** East End Pump Station (699-4094610)

**STATUS:** Ongoing

**PROJECT RANKING:** N/A

**PROGRAM DESCRIPTION:** Upgrades including a new Generator for the East End Pump Station. The Town's vehicle and equipment replacement policy includes provisions that call for adequate maintenance of Town vehicles and equipment and for their orderly rehabilitation and replacement within available revenue and budgetary limits. Budget includes the East End Generator.



**OPERATING IMPACT:** New generator will be more efficient will require normal maintenance activities

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Purcellville will set the regional standard for effective, integrated utility planning and growth management. Water and sewer facilities will be planned and designed to appropriately address desired future land use patterns.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2017	2017	2017

**Capital Improvement Program**

**Wastewater Fund**

**TITLE:** East End Pump Station (699-4094610)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Cash	200,000	-	200,000	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	200,000	-	200,000	-	-	-	-	-	-

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	200,000	-	200,000	-	-	-	-	-	-
	200,000	-	200,000	-	-	-	-	-	-

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Preventative Maintenance/Electricity	-	500	500	500	500	500	2,500

# **5-Year Priority Projects**

**Capital Improvement Program**

**5 Year Priority Projects**

**Wastewater Fund**

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	2,735,000	-	-	-	375,000	2,360,000	-	-	2,735,000
	2,735,000	-	-	-	375,000	2,360,000	-	-	2,735,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
West End Pump Station Improvements	725,000	-	-	-	375,000	350,000	-	-	725,000
Replacement Membranes	2,010,000	-	-	-	-	2,010,000	-	-	2,010,000
	2,735,000	-	-	-	375,000	2,360,000	-	-	2,735,000

**Wastewater Fund**

Project Name	Project Summary	Estimated Cost	Status
West End Pump Station Improvements	This project involves improvements to the West End Pump Station to replace aging equipment, provide back up power, dialing alarm system and meet the specifications of the Town's Facility Standards Manual to make the pump station reliable. The pump station is approximately 40 years old and uses a different type of pump technology than the other pump stations in town. Any upgrades of the pump station will require land negotiations as the current pump station is in an easement that will not fit the proposed modifications.	\$725,000	Awaiting Funding
Membrane Replacement at the Wastewater Treatment Plant	The O & M replacement plan suggests changing out the membranes every eight to ten years. The current membranes are running at 95% or greater efficiency due to staff's proactive and preventative cleaning schedule. Not moving forward would limit the Town's ability to comply with the Permit requirements.	\$2,010,000	Awaiting Funding

Draft detail sheets are available for some projects. In the proposed budget document, detail sheets will not be included for a project until it is approved by Council to move forward.

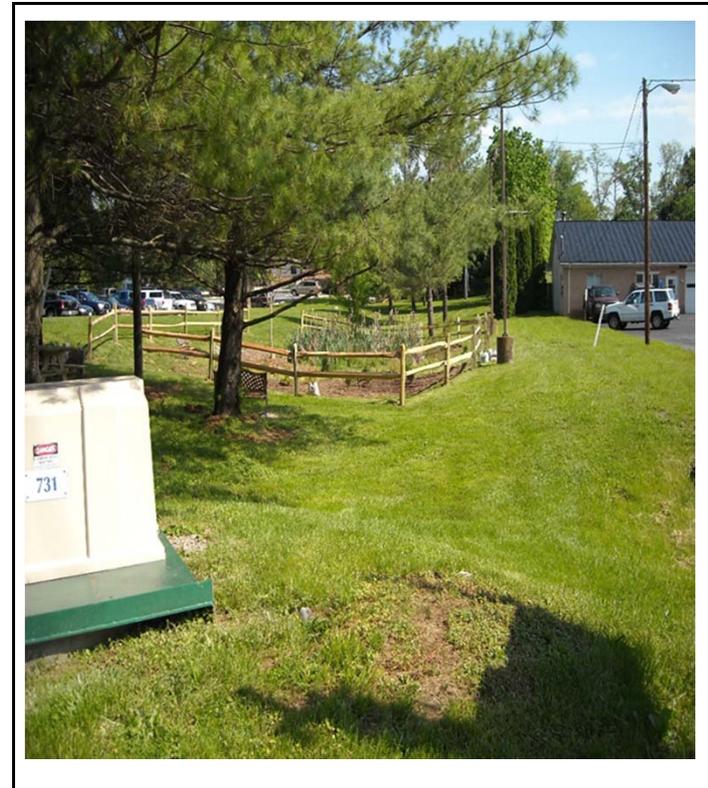
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**TITLE:** West End Pump Station Improvements (699-4094604)

**STATUS:** Future

**PROJECT RANKING:** 1

**PROGRAM DESCRIPTION:** This project involves improvements to the West End Pump Station to replace aging equipment, provide back up power, dialing alarm system and meet the specifications of the Town's Facility Standards Manual to make the pump station reliable. The pump station is approximately 40 years old and uses a different type of pump technology than the other pump stations in town. Any upgrades of the pump station will require land negotiations as the current pump station is in an easement that will not fit the proposed modifications.



**OPERATING IMPACT:** Will require fuel and preventative maintenance for the generator.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Utility systems will be encouraged to be cost-effective, efficient, and inclusive of state-of-the-art technology that promotes environmental protection, conservation and green development.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2019	2020	2020

**Capital Improvement Program**

**Wastewater Fund**

**TITLE:** West End Pump Station Improvements (699-4094604)

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	725,000	-	-	-	375,000	350,000	-	-	725,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	725,000	-	-	-	375,000	350,000	-	-	725,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	10,000	-	-	-	10,000	-	-	-	10,000
Engineering/Design	15,000	-	-	-	15,000	-	-	-	15,000
Construction	700,000	-	-	-	350,000	350,000	-	-	700,000
Professional Services	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
	725,000	-	-	-	375,000	350,000	-	-	725,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Preventative Maintenance/Electricity	-	-	2,000	2,000	2,000	2,000	8,000

**TITLE:** Replacement Membranes

**STATUS:** Future

**PROJECT RANKING:** 2

**PROGRAM DESCRIPTION:** The O & M replacement plan suggests changing out the membranes every eight to ten years. The current membranes are running at 95% or greater efficiency due to staff's proactive and preventative cleaning schedule. Not moving forward would limit the Town's ability to comply with the Permit requirements.



**OPERATING IMPACT:** No additional costs will be incurred other than the amounts currently being expended for preventative maintenance.

**GOAL ADDRESSED:** 2025 Comprehensive Plan

- Public Utilities and Transportation - Utility systems will be encouraged to be cost-effective, efficient, and inclusive of state-of-the-art technology that promotes environmental protection, conservation and green development.

**Significant Dates**

Engineering/Design Start	Construction Start	Estimated Completion
2020	2020	2020

**Capital Improvement Program**

**Wastewater Fund**

**TITLE:** Replacement Membranes

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Unidentified	2,010,000	-	-	-	-	2,010,000	-	-	2,010,000
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	2,010,000	-	-	-	-	2,010,000	-	-	2,010,000

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/16	Adopted FY17	Proposed					Total for 5-Yr CIP
				FY18	FY19	FY20	FY21	FY22	
Land/ROW/Legal	-	-	-	-	-	-	-	-	-
Engineering/Design	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-
Professional Services	10,000	-	-	-	-	10,000	-	-	10,000
Miscellaneous	2,000,000	-	-	-	-	2,000,000	-	-	2,000,000
	2,010,000	-	-	-	-	2,010,000	-	-	2,010,000

**Operating Impact**

Operating/Maintenance	Adopted FY17	Proposed					Total for 5-Yr CIP
		FY18	FY19	FY20	FY21	FY22	
Preventative Maintenance	-	-	-	7,000	7,000	7,000	21,000