

Capital Improvements Program

PURPOSE

The Capital Improvements Program (CIP) is the County's plan for investing in facilities, infrastructure and large-scale equipment and vehicles over the next five years. The CIP includes capital and capital-related expenditures and a plan to fund those expenditures. The following guidelines established in the County's Finance & Management Services Policies are used for qualifying expenditures under the CIP:

1. Facilities, equipment and vehicles with a unit cost greater than \$50,000; and
2. Purchases for multiple departments that are generally:
 - a. Managed by a single department or agency; or,
 - b. More than \$50,000 annually in aggregate.

The CIP is guided by the County's Comprehensive Plan, which is a long-term guide for growth and development within the County and outlines goals, objectives and projections of the County's needs for the next twenty-year horizon. The Code of Virginia requires that a CIP be prepared to carry out policies adopted through the Comprehensive Plan. The CIP performs this function by outlining anticipated projects by year, cost and recommended funding source. Hanover County has maintained compliance with capital outlay programs as stated in Section 15.2-2239 of the Code of Virginia as follows:

"A local planning commission may, and at the direction of the governing body shall, prepare and revise annually a capital improvement program based on the comprehensive plan of the locality for a period not to exceed the ensuing five years. The commission shall submit the program annually to the governing body, or to the chief administrative officer or other official charged with preparation of the budget for the locality, at such time as it or he shall direct. The capital improvement program shall include the commission's recommendations, and estimates of cost of the facilities and life cycle costs, including any road improvement and any transportation improvement the locality chooses to include in its capital improvement plan and as provided for in the comprehensive plan, and the means of financing them, to be undertaken in the ensuing fiscal year and in a period not to exceed the next four years, as the basis of the capital budget for the locality. In the preparation of its capital budget recommendations, the commission shall consult with the chief administrative officer or other executive head of the government of the locality, the heads of departments and interested citizens and organizations and shall hold such public hearings as it deems necessary."

The CIP is used to assess the County's existing condition and identify needs that must be addressed to accomplish planning goals set forth in the Comprehensive Plan. The CIP sets forth needs and priorities to coordinate the development of County facilities with anticipated revenues, growth and the community's ability to pay. By saying where public schools, water or sewer lines, drainage and other improvements should be constructed, the County can encourage development in appropriate areas. "Appropriate" is used here to mean consistent with adopted policies. This makes the CIP a key document in influencing and managing growth. The CIP is also an important tool in ensuring efficient use of limited financial resources. By reviewing anticipated revenues with anticipated capital needs, priorities can be established to ensure that essential public services can be continued and improved without interruption.

Capital Improvements Program

PROCESS

The CIP process occurs in conjunction with the County's budget process. Departments request individual projects based on their needs assessments. The County Administrator works with the Budget Division and County Administrator's senior staff to review and recommend projects based on an assessment of community needs and financial resources available. The Planning Commission reviews CIP projects related to the Comprehensive Plan and provides input to the Board of Supervisors. The Board of Supervisors conducts a public hearing and acts on the recommendations of the proposed budget.

FUNDING SOURCES

The Five-Year CIP forecasts the anticipated expenditures, timetable and source of funding for each project. The adoption of the CIP does not appropriate funds, nor commit the Board to any expenditure in fiscal years two through five. The first fiscal year is appropriated as part of the Adopted Budget.

The relationship between the CIP and the operating budget is carefully considered during the budget process. The CIP has three direct impacts on the operating budget:

1. Projects funded with General Fund resources must be evaluated and prioritized with other competing needs for use of resources for that year;
2. Projects funded with long-term debt financing must be in compliance with the debt policy and must anticipate the impact of the repayment of debt service on current and future budget years; and
3. Operating impact life cycle costs from implementation, such as staffing and maintenance costs.

Typical funding sources for CIP projects include, but are not limited to:

Fund Balance Assignment (FBA): Funds transferred from the General Fund that were classified as assigned fund balance and in excess of the unassigned fund balance required by County policy.

General Fund (Transfer from General Fund): Direct payments from the County's operating revenue.

Local Non-Property Taxes (Sales & Fuel Tax): Payments received through the Central Virginia Transportation Authority (CVTA) to fund local roads projects. The CVTA administers transportation funding generated through an additional regional 0.7% sales and use tax, and a wholesale gas tax of 7.6 cents per gallon of gasoline and 7.7 cents per gallon of diesel fuel.

Long-Term Debt (Bond Proceeds): Money borrowed through financing mechanisms, such as bonds. The payment of principal and interest on borrowed money is through the Debt Service Fund.

Proffers (Traffic Contribution): The Board adopted the *Business and Residential Development Road Improvements Transportation Policy* in March 2013. The policy supports the implementation of a road impact cash contribution for road improvements. Revenues received from the contribution are used to fund road improvements to address the increased traffic demand arising from residential development. The cash contribution is only negotiated for residential zoning requests and the actual value of the cash contribution is based on the *Road Improvement Cost Assumptions*.

Public Utilities: Revenue generated by the Department of Public Utilities and used for capital projects.

State and Federal Aid: Payments from state and federal governments to support projects promoted by state and federal agencies.

Capital Improvements Program

CIP PROJECT PAGES

Each CIP project page contains the following information:

Fund Name: There are four capital improvements funds. The fund name for each CIP project is located at the top-right of the page.

Department: For the County Improvements Fund, this represents the department with oversight responsibility for the project. If applicable, other departments will provide assistance to ensure that the capital improvement meets all specifications, laws and budgetary controls.

For School and Airport improvements, the fund name is listed. Public Utilities includes three categories under Department for purposes of distinguishing project areas: PU CIP Other, PU CIP Sewer and PU CIP Water.

Project Type: CIP projects fall under one of the following categories: Construction, Equipment, Facility Improvements, Land Acquisition, Reserve, Roads & Public Works, Technology, Utility Infrastructure, Utility Service Agreement or Vehicles.

Functional Area: The functional area is a group of related departments aimed at accomplishing a major service or regulatory program for which a government is responsible, such as General Government, Public Safety or Human Services.

Location: The physical location (building, complex, etc.) of the capital improvement. Projects will reflect "Countywide" as a location if the capital improvement is not physically set or maintained in one location.

Project Description: A brief description addressing the need for the project and providing other pertinent information.

Useful Life: The estimated amount of time before an asset will need to be replaced based on the expected quality, application and environment of that asset.

Timetable: When the project is anticipated to be completed. If construction of a capital improvement is required, the estimated starting and ending dates are noted.

Operating Impact: Operating impact describes what effect, if any, the capital improvement will have on the operating budget. Impacts may include an increase or decrease in salaries & benefits, operating and/or capital outlay. Operating impacts to the General Fund are incorporated into the Five-Year General Fund Financial Plan. Debt service impacts are shown in the Five-Year General Fund Financial Plan and the Debt Service Fund section of the budget. Any reduced expenditures or increased revenues are noted when applicable.

Funding Sources: Funding sources are categorized by revenue type and are shown by plan year as well as in total.

Funding Uses: Funding uses are categorized by the type of expenditure(s) and are shown by plan year as well as in total.

Years: For reference, the fiscal years in the Five-Year CIP are as follows:

Year 1 represents FY22; Year 2 represents FY23; Year 3 represents FY24; Year 4 represents FY25; and Year 5 represents FY26.

Capital Improvements Program

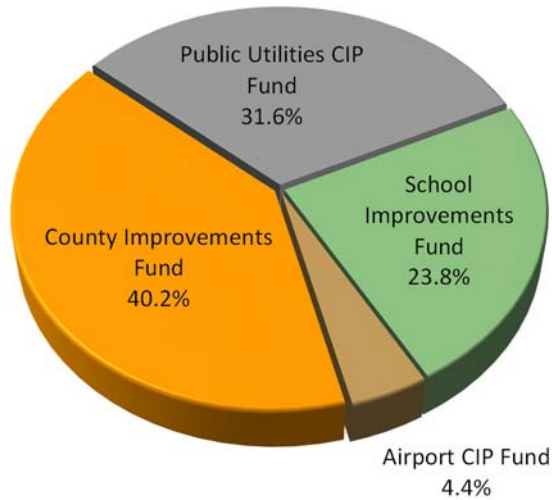
SAMPLE CAPITAL IMPROVEMENT PROJECT

Capital Improvements Program	County Improvements Fund
Tow Vehicle	
DEPARTMENT Fire-EMS	PROJECT TYPE Vehicles
FUNCTIONAL AREA Public Safety	LOCATION Fire-EMS Administration
PROJECT DESCRIPTION Purchase a pick-up truck that is rated for towing the department's larger trailers, including the decontamination trailer also funded in FY22 (Year 1).	
USEFUL LIFE 10 years	
TIMETABLE Purchase in FY22 (Year 1)	
OPERATING IMPACT Increased operational costs are not anticipated.	
	Year 1 Year 2 Year 3 Year 4 Year 5 Total
Funding Sources	50,000 - - - - 50,000
Transfer from GF - FBA Capital	50,000 - - - - 50,000
Funding Uses	50,000 - - - - 50,000
Motor Vehicle & Equip Addtl	50,000 - - - - 50,000

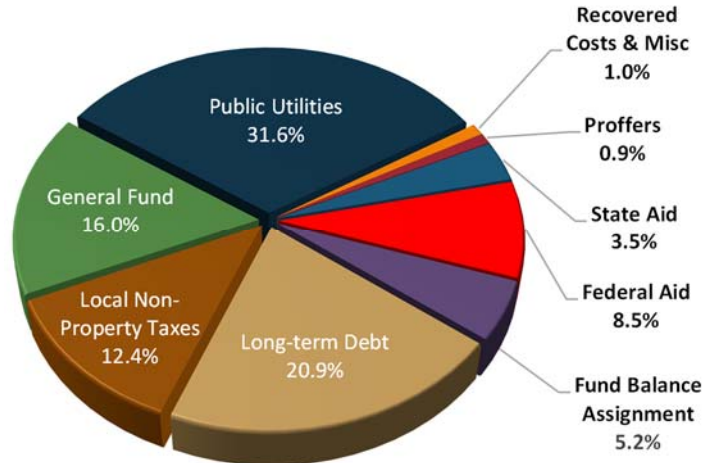
Capital Improvements Program At a Glance

FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM: ALL FUNDS (\$351,585,251)

FY22-FY26 CIP by Fund



FY22-FY26 CIP Funding Sources

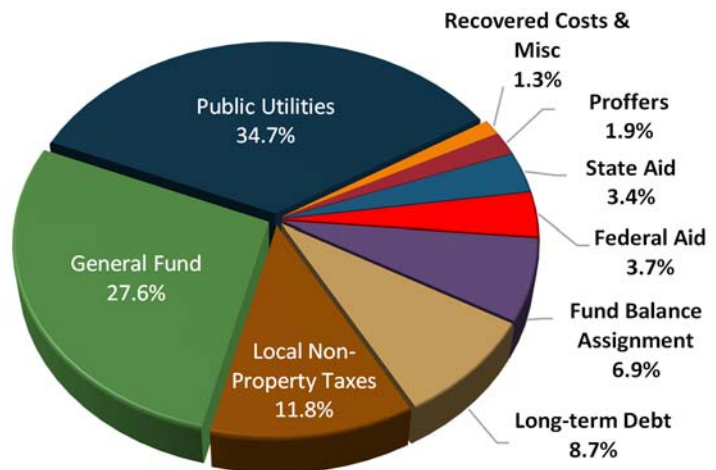


FY22 CIP PROJECTS: ALL FUNDS (\$52,785,052)

The first fiscal year of the CIP is appropriated in conjunction with the annual operating budget. The following is a summary of the CIP funding distribution for FY22– Year 1 of the five-year plan.

Functional Area	FY22 (Millions)
Public Utilities	18.3
Public Works	14.7
Education	7.0
Public Safety	5.2
Judicial Administration	4.6
General Government	1.8
Nondepartmental	0.7
Airport	0.5
Grand Total	52.8

FY22 CIP Funding Sources



CIP Projects by Department

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	538,890	449,000	8,566,250	1,006,250	5,000,000	15,560,390
Airport CIP	538,890	449,000	8,566,250	1,006,250	5,000,000	15,560,390
East Side Taxiway Parallel	-	-	-	562,500	5,000,000	5,562,500
Land Acquisition and Avigation Easements	-	-	8,566,250	443,750	-	9,010,000
Safety Improvements	538,890	449,000	-	-	-	987,890
County Improvements Fund	26,915,513	34,400,167	27,290,735	21,806,628	30,981,011	141,394,054
Board of Supervisors	-	-	-	450,000	-	450,000
Board Room Video System Replacement	-	-	-	450,000	-	450,000
Circuit Court	4,550,000	-	-	-	-	4,550,000
Courtroom Renovation	4,550,000	-	-	-	-	4,550,000
Emergency Communications	-	1,250,000	-	900,000	-	2,150,000
Public Safety Microwave Radio Repl	-	-	-	900,000	-	900,000
Public Safety Software Upgrade	-	1,250,000	-	-	-	1,250,000
Fire-EMS	5,087,000	8,957,000	3,060,000	2,030,000	3,060,000	22,194,000
Ambulance Replacement	660,000	660,000	660,000	660,000	660,000	3,300,000
Decontamination Trailer	72,000	-	-	-	-	72,000
Diesel Exhaust Removal System	90,000	-	180,000	-	180,000	450,000
Fire Engine & Heavy Rescue Replacement	1,200,000	1,797,000	1,370,000	1,370,000	1,820,000	7,557,000
Fire Prevention Safety House Repl	-	-	150,000	-	-	150,000
Fire Station #17	1,415,000	6,500,000	-	-	-	7,915,000
Mobile Command Repl	-	-	-	-	400,000	400,000
Station Alerting System Upgrade	1,600,000	-	-	-	-	1,600,000
Tow Vehicle	50,000	-	-	-	-	50,000
Traffic Preemption	-	-	700,000	-	-	700,000
General Services	3,480,000	340,000	4,700,000	760,000	4,475,000	13,755,000
Admin Building Center Roof Replacement	-	-	-	150,000	-	150,000
County Facility Construction/Renovation	-	-	4,000,000	-	4,000,000	8,000,000
Courthouse Secured Parking	-	-	-	-	75,000	75,000
Fire-EMS Generator Replacement	60,000	-	60,000	-	60,000	180,000
Fleet & Facilities Software Systems Repl	-	-	300,000	-	-	300,000
General Vehicle Replacement	420,000	340,000	340,000	420,000	340,000	1,860,000
Human Services Complex Boiler Repl	-	-	-	55,000	-	55,000
Vaughan-Bradley Roof Replacement	-	-	-	135,000	-	135,000
Wickham Renovations	3,000,000	-	-	-	-	3,000,000
Information Technology	1,825,000	1,935,000	1,830,000	2,000,000	1,950,000	9,540,000
Computer Replacement Program	150,000	150,000	160,000	175,000	200,000	835,000
Data Center Firewall	-	-	-	125,000	-	125,000
Data Center Upgrades	-	75,000	-	-	-	75,000
Enterprise Licenses	700,000	710,000	720,000	750,000	800,000	3,680,000
Storage Area Network	175,000	175,000	200,000	200,000	200,000	950,000
Technology Infrastructure	800,000	825,000	750,000	750,000	750,000	3,875,000
Nondepartmental	700,000	700,000	700,000	700,000	700,000	3,500,000
Reserve for Revenue	700,000	700,000	700,000	700,000	700,000	3,500,000
Parks & Recreation	-	235,000	200,000	-	2,570,000	3,005,000
Park Enhancements	-	235,000	200,000	-	70,000	505,000
Park/Cultural Development	-	-	-	-	2,500,000	2,500,000

CIP Projects by Department

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Public Works	11,072,353	18,828,967	16,400,735	14,610,778	18,052,415	78,965,248
Rdwy Impr Atlee Station Widening	1,114,980	914,980	714,980	4,514,980	8,765,365	16,025,285
Rdwy Impr Pole Green Widening	3,925,200	1,707,200	4,253,950	986,198	-	10,872,548
Rdwy Impr US Rt 360 / Lee Davis Rd	303,223	7,689,187	1,000,755	-	-	8,993,165
Reserve for Future Roadway Improvements	4,728,950	7,517,600	7,521,960	8,109,600	8,287,050	36,165,160
Stormwater Program	1,000,000	1,000,000	2,909,090	1,000,000	1,000,000	6,909,090
Public Works Operations	151,160	154,200	400,000	355,850	173,596	1,234,806
Solid Waste Equipment Replacement	151,160	154,200	400,000	355,850	173,596	1,234,806
Sheriff	50,000	2,000,000	-	-	-	2,050,000
Investigative Forensics Vehicle	50,000	-	-	-	-	50,000
Records Management System Replacement	-	2,000,000	-	-	-	2,000,000
Public Utilities CIP Fund	18,330,649	26,402,778	23,555,211	22,745,661	20,121,508	111,155,807
PU CIP Other	525,000	1,340,000	310,000	176,000	282,000	2,633,000
Asset Management System	250,000	-	-	-	-	250,000
Bruce Center Addition	-	960,000	-	-	-	960,000
Bruce Center Exterior Painting	-	-	-	-	92,000	92,000
Maintenance Equipment Replacement	-	115,000	-	-	-	115,000
Maintenance Vehicle Replacement	275,000	265,000	310,000	176,000	190,000	1,216,000
PU CIP Sewer	4,386,000	16,250,000	13,295,000	12,866,000	14,448,000	61,245,000
Academy Creek Parallel Trunk Sewer	-	-	-	-	300,000	300,000
Ashland Sewerline Rehabilitation	-	200,000	800,000	-	-	1,000,000
AWWTP Belt Press Sludge Conveyor Repl	-	-	-	-	371,000	371,000
AWWTP Blower & Basin Pump Repl	-	-	1,026,000	-	-	1,026,000
AWWTP Motor Control Center Equip Rehab	108,000	-	-	-	-	108,000
AWWTP Orbal Drives Replacement	-	-	-	521,000	-	521,000
AWWTP Recycle PS Rehab	98,000	-	-	-	-	98,000
Burnside Farms/Summer Walk Sewer Repl	-	1,491,000	-	-	-	1,491,000
BWWPS Odor Control Replacement	-	-	-	762,000	-	762,000
BWWPS Painting	-	-	-	-	94,000	94,000
Doswell Offload WWPS #2 & Force Main	-	-	-	10,462,000	-	10,462,000
Doswell WWTP Upgrade	-	-	-	-	1,300,000	1,300,000
DWWTP Belt Press Replacement	-	569,000	-	-	-	569,000
DWWTP Influent VFDs Replacement	-	-	-	177,000	-	177,000
DWWTP RAS Pump Replacement	72,000	-	-	-	-	72,000
DWWTP Sludge Drying Beds #1-3 Rehab	-	-	-	-	236,000	236,000
Hanover Indust Airpark Sewerline Rehab	-	-	-	-	200,000	200,000
Hanover WWPS Generator Replacement	-	-	-	-	101,000	101,000
Large Pumps Replacement WWPS	133,000	57,000	140,000	144,000	62,000	536,000
Lee-Davis WWPS Grinder Replacement	226,000	-	-	-	-	226,000
Mechanicsville Sewer Rehabilitation	-	-	200,000	800,000	-	1,000,000
Middle Chickahominy WWPS Upgrade	1,200,000	-	-	-	-	1,200,000
Purchase Septage Hauling Site	-	-	-	-	500,000	500,000
Shelton Pointe Force Main Upgrade	-	7,072,000	-	-	-	7,072,000
Shelton Pointe WWPS Upgrade	224,000	-	915,000	-	-	1,139,000
Snead Street WWPS Generator Replacement	-	-	78,000	-	-	78,000
Stony Run Phases 7 & 8	-	-	-	-	811,000	811,000
TWWTP Alum Tank Replacement	-	-	-	-	124,000	124,000
TWWTP Improvements	815,000	-	-	-	-	815,000
TWWTP PLC 3 Replacement	88,000	-	-	-	-	88,000
TWWTP Scrubber Overhaul	-	-	-	-	306,000	306,000

CIP Projects by Department

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
TWWTP Sodium Hydroxide Tank Replacement	-	112,000	-	-	-	112,000
WIP III Upgrades AWWTP	-	-	2,511,000	-	10,043,000	12,554,000
WIP III Upgrades DWWTP	622,000	6,100,000	-	-	-	6,722,000
WIP III Upgrades TWWTP	800,000	649,000	7,625,000	-	-	9,074,000
PU CIP Water	13,419,649	8,812,778	9,950,211	9,703,661	5,391,508	47,277,807
Air Park Water Tank Rehabilitation	795,000	-	-	-	-	795,000
Ashcake Rd W/L - Elmont Rd to Oakhill Estates	-	-	-	-	317,000	317,000
Creighton Road WST Recoating & Rehab	500,000	-	-	-	-	500,000
Doswell Million Gallon Tank Rehab	-	670,000	-	-	-	670,000
Dow Gil Rd to Harley Club Dr Waterline	-	-	457,000	-	1,557,000	2,014,000
DWTP Lagoon Rehabilitation	-	92,000	979,000	-	-	1,071,000
DWTP Raw Water Pumphouse Rehabilitation	-	-	118,000	680,000	-	798,000
England Street Waterline Replacement	250,000	-	-	-	-	250,000
Georgetown Electrical	-	58,000	-	-	-	58,000
Georgetown Well Replacement	-	-	-	105,000	-	105,000
Hanover-Richmond Joint Cap Contract	3,451,649	7,757,778	7,231,211	4,951,661	1,810,508	25,202,807
Harris Court WST Rehabilitation	393,000	-	-	-	-	393,000
Hill Carter WST & Pump Station	7,210,000	-	-	-	-	7,210,000
Kings Dominion Entrance Rd W/L	-	-	352,000	1,409,000	-	1,761,000
Maple Street Waterline Replacement	-	-	-	100,000	213,000	313,000
Pamunkey Regional Jail Waterline	-	-	255,000	1,224,000	-	1,479,000
Pole Green Road Western W/L Improvements	-	235,000	-	672,000	-	907,000
PRJ Well Head Generator Replacement	-	-	-	-	55,000	55,000
PRJ Well House Generator Replacement	189,000	-	-	-	-	189,000
Quarles Rd WST & Pleasant St WST Demo	-	-	-	360,000	-	360,000
Route 1 from Elletts Crossing	-	-	-	68,000	516,000	584,000
Route 1 Waterline Improvements	526,000	-	-	-	-	526,000
Sinclair Manor Well Replacement	-	-	102,000	-	-	102,000
Snead Street Waterline Replacement	-	-	-	-	81,000	81,000
South Railroad Avenue Waterline Replacement	-	-	-	-	342,000	342,000
Strawhorn Interconnect Waterline	105,000	-	336,000	-	-	441,000
Verdon Quarry Reservoir	-	-	-	-	500,000	500,000
Water System Valve Improvements	-	-	120,000	134,000	-	254,000
School Improvements Fund	7,000,000	49,525,000	3,000,000	13,250,000	10,700,000	83,475,000
School CIP	7,000,000	49,525,000	3,000,000	13,250,000	10,700,000	83,475,000
Auditorium Renovations	-	700,000	-	-	-	700,000
Bathroom Renovations	-	790,000	-	-	-	790,000
Gymnasium Repairs	-	800,000	-	-	-	800,000
HVAC Repairs & Upgrades	-	1,250,000	-	1,695,000	-	2,945,000
Kitchen Renovations	-	75,000	-	370,000	-	445,000
Painting	455,000	100,000	159,562	200,000	200,000	1,114,562
Roof Repairs & Replacements	100,000	593,000	200,000	675,000	300,000	1,868,000
Safety & Security	-	965,000	-	1,980,000	-	2,945,000
School Building Upgrades	-	645,000	-	-	-	645,000
School Buses	1,000,000	1,500,000	1,500,000	1,500,000	1,500,000	7,000,000
School Grounds Upgrades	-	870,000	-	1,630,000	-	2,500,000
School Renovation/Replacement	4,000,000	36,000,000	-	-	4,100,000	44,100,000
School Site	-	3,000,000	-	-	-	3,000,000
Technology Enhancements	1,445,000	2,237,000	1,140,438	5,200,000	4,600,000	14,622,438
Grand Total	52,785,052	110,776,945	62,412,196	58,808,539	66,802,519	351,585,251

Five-Year CIP Funding Sources

	Federal Aid	Fund Balance Assignment	General Fund	Local Non-Property Taxes	Long-term Debt	Proffers	Public Utilities	Recovered Costs & Misc	State Aid	Grand Total
Vaughan-Bradley Roof Replacement	-	-	135,000	-	-	-	-	-	-	135,000
Wickham Renovations	-	3,000,000	-	-	-	-	-	-	-	3,000,000
Information Technology	-	-	9,540,000	-	-	-	-	-	-	9,540,000
Computer Replacement Program	-	-	835,000	-	-	-	-	-	-	835,000
Data Center Firewall	-	-	125,000	-	-	-	-	-	-	125,000
Data Center Upgrades	-	-	75,000	-	-	-	-	-	-	75,000
Enterprise Licenses	-	-	3,680,000	-	-	-	-	-	-	3,680,000
Storage Area Network	-	-	950,000	-	-	-	-	-	-	950,000
Technology Infrastructure	-	-	3,875,000	-	-	-	-	-	-	3,875,000
Nondepartmental	-	-	-	-	-	-	-	3,500,000	-	3,500,000
Reserve for Revenue	-	-	-	-	-	-	-	3,500,000	-	3,500,000
Parks & Recreation	-	-	505,000	-	2,500,000	-	-	-	-	3,005,000
Park Enhancements	-	-	505,000	-	-	-	-	-	-	505,000
Park/Cultural Development	-	-	-	-	2,500,000	-	-	-	-	2,500,000
Public Works	16,732,298	2,325,417	2,850,000	43,616,300	-	3,100,000	-	-	10,341,233	78,965,248
Rdwy Impr Atlee Station Widening	5,200,000	575,417	-	3,000,000	-	3,100,000	-	-	4,149,868	16,025,285
Rdwy Impr Pole Green Widening	4,971,798	-	-	4,000,000	-	-	-	-	1,900,750	10,872,548
Rdwy Impr US Rt 360 / Lee Davis Rd	6,560,500	1,000,000	-	951,140	-	-	-	-	481,525	8,993,165
Reserve for Future Roadway Improvements	-	-	-	35,665,160	-	-	-	-	500,000	36,165,160
Stormwater Program	-	750,000	2,850,000	-	-	-	-	-	3,309,090	6,909,090
Public Works Operations	-	-	1,234,806	-	-	-	-	-	-	1,234,806
Solid Waste Equipment Replacement	-	-	1,234,806	-	-	-	-	-	-	1,234,806
Sheriff	-	400,000	1,650,000	-	-	-	-	-	-	2,050,000
Investigative Forensics Vehicle	-	50,000	-	-	-	-	-	-	-	50,000
Records Management System Replacement	-	350,000	1,650,000	-	-	-	-	-	-	2,000,000
Public Utilities CIP Fund	-	-	-	-	-	-	111,155,807	-	-	111,155,807
PU CIP Other	-	-	-	-	-	-	2,633,000	-	-	2,633,000
PU CIP Sewer	-	-	-	-	-	-	61,245,000	-	-	61,245,000
PU CIP Water	-	-	-	-	-	-	47,277,807	-	-	47,277,807

Five-Year CIP Funding Sources

	Federal Aid	Fund Balance Assignment	General Fund	Local Non-Property Taxes	Long-term Debt	Proffers	Public Utilities	Recovered Costs & Misc	State Aid	Grand Total
School Improvements Fund	-	8,450,000	15,150,000	-	59,875,000	-	-	-	-	83,475,000
School CIP	-	8,450,000	15,150,000	-	59,875,000	-	-	-	-	83,475,000
Auditorium Renovations	-	-	-	-	700,000	-	-	-	-	700,000
Bathroom Renovations	-	-	-	-	790,000	-	-	-	-	790,000
Gymnasium Repairs	-	-	-	-	800,000	-	-	-	-	800,000
HVAC Repairs & Upgrades	-	-	-	-	2,945,000	-	-	-	-	2,945,000
Kitchen Renovations	-	-	-	-	445,000	-	-	-	-	445,000
Painting	-	-	1,114,562	-	-	-	-	-	-	1,114,562
Roof Repairs & Replacements	-	-	863,000	-	1,005,000	-	-	-	-	1,868,000
Safety & Security	-	-	-	-	2,945,000	-	-	-	-	2,945,000
School Building Upgrades	-	-	-	-	645,000	-	-	-	-	645,000
School Buses	-	-	7,000,000	-	-	-	-	-	-	7,000,000
School Grounds Upgrades	-	-	-	-	2,500,000	-	-	-	-	2,500,000
School Renovation/Replacement	-	-	-	-	44,100,000	-	-	-	-	44,100,000
School Site	-	-	-	-	3,000,000	-	-	-	-	3,000,000
Technology Enhancements	-	8,450,000	6,172,438	-	-	-	-	-	-	14,622,438
Grand Total	29,798,173	18,451,417	56,142,109	43,616,300	73,475,000	3,100,000	111,155,807	3,500,000	12,346,445	351,585,251

CIP Summary by Functional Area

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	538,890	449,000	8,566,250	1,006,250	5,000,000	15,560,390
County Improvements Fund	26,915,513	34,400,167	27,290,735	21,806,628	30,981,011	141,394,054
General Government	1,825,000	1,935,000	1,830,000	2,450,000	1,950,000	9,990,000
Judicial Administration	4,550,000	-	-	-	-	4,550,000
Nondepartmental	700,000	700,000	700,000	700,000	700,000	3,500,000
Parks, Recreation & Cultural	-	235,000	200,000	-	2,570,000	3,005,000
Public Safety	5,137,000	12,207,000	3,060,000	2,930,000	3,060,000	26,394,000
Public Works	14,703,513	19,323,167	21,500,735	15,726,628	22,701,011	93,955,054
Public Utilities CIP Fund	18,330,649	26,402,778	23,555,211	22,745,661	20,121,508	111,155,807
School Improvements Fund	7,000,000	49,525,000	3,000,000	13,250,000	10,700,000	83,475,000
Grand Total	52,785,052	110,776,945	62,412,196	58,808,539	66,802,519	351,585,251

CIP Project Type by Fund

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	538,890	449,000	8,566,250	1,006,250	5,000,000	15,560,390
Facility Improvements	538,890	449,000	-	562,500	5,000,000	6,550,390
Land Acquisition	-	-	8,566,250	443,750	-	9,010,000
County Improvements Fund	26,915,513	34,400,167	27,290,735	21,806,628	30,981,011	141,394,054
Construction	1,415,000	6,500,000	-	-	-	7,915,000
Equipment	1,841,160	154,200	1,280,000	1,705,850	353,596	5,334,806
Facility Improvements	7,610,000	235,000	4,260,000	340,000	6,705,000	19,150,000
Reserve	700,000	700,000	700,000	700,000	700,000	3,500,000
Roads & Public Works	11,072,353	18,828,967	16,400,735	14,610,778	18,052,415	78,965,248
Technology	1,825,000	5,185,000	2,130,000	2,000,000	1,950,000	13,090,000
Vehicles	2,452,000	2,797,000	2,520,000	2,450,000	3,220,000	13,439,000
Public Utilities CIP Fund	18,330,649	26,402,778	23,555,211	22,745,661	20,121,508	111,155,807
Construction	-	960,000	-	-	-	960,000
Equipment	88,000	115,000	-	-	-	203,000
Facility Improvements	-	-	-	-	92,000	92,000
Land Acquisition	-	-	-	-	500,000	500,000
Technology	250,000	-	-	-	-	250,000
Utility Infrastructure	14,266,000	17,305,000	16,014,000	17,618,000	17,529,000	82,732,000
Utility Service Agreement	3,451,649	7,757,778	7,231,211	4,951,661	1,810,508	25,202,807
Vehicles	275,000	265,000	310,000	176,000	190,000	1,216,000
School Improvements Fund	7,000,000	49,525,000	3,000,000	13,250,000	10,700,000	83,475,000
Construction	4,000,000	36,000,000	-	-	4,100,000	44,100,000
Equipment	-	965,000	-	1,980,000	-	2,945,000
Facility Improvements	555,000	5,823,000	359,562	4,570,000	500,000	11,807,562
Land Acquisition	-	3,000,000	-	-	-	3,000,000
Technology	1,445,000	2,237,000	1,140,438	5,200,000	4,600,000	14,622,438
Vehicles	1,000,000	1,500,000	1,500,000	1,500,000	1,500,000	7,000,000
Grand Total	52,785,052	110,776,945	62,412,196	58,808,539	66,802,519	351,585,251

CIP Summary by Funding Source

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Intergovernmental	3,729,535	8,265,187	13,007,580	4,892,448	12,249,868	42,144,618
Long-term Debt	4,600,000	52,025,000	-	6,250,000	10,600,000	73,475,000
Use of Planned Surpluses	114,980	114,980	114,980	114,980	115,497	575,417
Transfers In	36,411,587	40,354,178	38,516,536	36,841,511	33,050,104	185,173,916
Local Revenue	7,928,950	10,017,600	10,773,100	10,709,600	10,787,050	50,216,300
Grand Total	52,785,052	110,776,945	62,412,196	58,808,539	66,802,519	351,585,251

CIP Funding Sources by Fund

Funding Sources by Fund	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	538,890	449,000	8,566,250	1,006,250	5,000,000	15,560,390
Federal Aid	350,000	-	7,709,625	506,250	4,500,000	13,065,875
Fund Balance Assignment	-	-	64,000	-	-	64,000
General Fund	37,778	80,200	107,325	100,000	100,000	425,303
State Aid	151,112	368,800	685,300	400,000	400,000	2,005,212
County Improvements Fund	26,915,513	34,400,167	27,290,735	21,806,628	30,981,011	141,394,054
Federal Aid	1,583,223	6,513,262	2,449,615	2,986,198	3,200,000	16,732,298
Fund Balance Assignment	3,626,980	1,464,980	4,614,980	114,980	115,497	9,937,417
General Fund	11,531,160	8,521,200	7,290,000	6,995,850	6,228,596	40,566,806
Local Non-Property Taxes	6,228,950	8,517,600	9,473,100	9,609,600	9,787,050	43,616,300
Long-term Debt	600,000	6,500,000	-	-	6,500,000	13,600,000
Proffers	1,000,000	800,000	600,000	400,000	300,000	3,100,000
Recovered Costs & Misc	700,000	700,000	700,000	700,000	700,000	3,500,000
State Aid	1,645,200	1,383,125	2,163,040	1,000,000	4,149,868	10,341,233
Public Utilities CIP Fund	18,330,649	26,402,778	23,555,211	22,745,661	20,121,508	111,155,807
Public Utilities	18,330,649	26,402,778	23,555,211	22,745,661	20,121,508	111,155,807
School Improvements Fund	7,000,000	49,525,000	3,000,000	13,250,000	10,700,000	83,475,000
Fund Balance Assignment	-	1,000,000	-	4,000,000	3,450,000	8,450,000
General Fund	3,000,000	3,000,000	3,000,000	3,000,000	3,150,000	15,150,000
Long-term Debt	4,000,000	45,525,000	-	6,250,000	4,100,000	59,875,000
Grand Total	52,785,052	110,776,945	62,412,196	58,808,539	66,802,519	351,585,251

Funding Analysis of County & School Capital Projects

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Total Debt Funding	13.6%	62.0%	0.0%	17.8%	25.4%	20.9%
Total Non-Debt Funding	86.4%	38.0%	100.0%	82.2%	74.6%	79.1%
General Fund Support	42.8%	13.7%	34.0%	28.5%	22.5%	16.0%
Support from Other Sources	43.6%	24.3%	66.0%	53.7%	52.1%	63.1%

Five-Year CIP Operating Impact

	Year 1 Budget	Year 2 Budget	Year 3 Budget	Year 4 Budget	Year 5 Budget	Total 5-Year Budget
Airport CIP Fund	-	-	-	-	1,200	1,200
Airport CIP						
East Side Taxiway Parallel	-	-	-	-	1,200	1,200
County Improvements Fund	500	105,500	242,100	247,100	297,100	892,300
Board of Supervisors						
Board Room Video System Replacement	-	-	-	-	50,000	50,000
Fire-EMS						
Station Alerting System Upgrade	-	105,000	105,000	105,000	105,000	420,000
General Services						
Fleet & Facilities Software Systems Repl	-	-	-	5,000	5,000	10,000
Parks & Recreation						
Park Enhancements	-	-	1,600	1,600	1,600	4,800
Sheriff						
Investigative Forensics Vehicle	500	500	500	500	500	2,500
Records Management System Replacement	-	-	135,000	135,000	135,000	405,000
Public Utilities CIP Fund	-	65,000	70,000	328,000	874,500	1,337,500
PU CIP Other						
Asset Management System	-	30,000	30,000	30,000	30,000	120,000
Bruce Center Addition	-	-	5,000	5,000	5,000	15,000
Maintenance Vehicle Replacement	-	-	-	-	1,500	1,500
PU CIP Sewer						
Ashland Sewerline Rehabilitation	-	-	-	(5,000)	(5,000)	(10,000)
Doswell Offload WWPS #2 & Force Main	-	-	-	-	50,000	50,000
Mechanicsville Sewer Rehabilitation	-	-	-	-	(5,000)	(5,000)
Middle Chickahominy WWPS Upgrade	-	5,000	5,000	5,000	5,000	20,000
Shelton Pointe Force Main Upgrade	-	-	-	8,000	8,000	16,000
Shelton Pointe WWPS Upgrade	-	-	-	5,000	5,000	10,000
WIP III Upgrades DWWTP	-	-	-	250,000	250,000	500,000
WIP III Upgrades TWWTP	-	-	-	-	500,000	500,000
PU CIP Water						
Hill Carter WST & Pump Station	-	30,000	30,000	30,000	30,000	120,000
Grand Total	500	170,500	312,100	575,100	1,172,800	2,231,000

All financial impacts noted above are under the Operating category. Additional detail is provided on each CIP project page.

Operating impacts to the General Fund are reflected in the Five-Year General Fund Financial Plan. Year 1 Life Cycle Costs are included in operating budgets for the indicated funds. Debt service impacts are not detailed under this table but are included in the Five-Year General Fund Financial Plan and the Debt Service Fund section of the Budget document.

County Project Locations

The following are specific locations referenced within the project pages of the Airport CIP and County Improvements Funds, including the corresponding address and departments located at each building, as applicable. Projects that serve multiple locations are generally identified in the project pages as “Countywide” or by the type of facility impacted, such as such as Fire-EMS stations and solid waste convenience centers.

Fleet Building <i>General Services</i>	11375 N. Lakeridge Parkway, Ashland, VA 23005
Hanover County Airport	11152 Airpark Road, Ashland, VA 23005
Human Services Complex <i>Community Services Board, Community Resources, Health, Social Services</i>	12300-12312 Washington Highway, Ashland, VA 23005
Sheriff's Firing Range Complex	7532 Courtland Farm Road, Hanover, VA 23069
<u>Courthouse Complex</u>	
Administration Building <i>Board of Supervisors meeting room, Building Inspections, County Administrator, County Attorney, Planning, Public Utilities, Public Works</i>	7516 County Complex Road, Hanover, VA 23069
Courthouse <i>Circuit Court, Clerk of the Circuit Court, Commonwealth's Attorney, General District Court, Juvenile & Domestic Relations Court, Juvenile Court Services</i>	7530 County Complex Road, Hanover, VA 23069
Emergency Communications Center	7501 Library Drive, Hanover, VA 23069
Facilities Management <i>General Services</i>	7490 Library Drive, Hanover, VA 23069
Vaughan-Bradley Building <i>Sheriff</i>	7522 County Complex Road, Hanover, VA 23069
Wickham Building <i>Information Technology, Registrar</i>	7497 County Complex Road, Hanover, VA 23069

Airport CIP Fund Summary

FY22-FY26 Funding Sources by Project Type

	Facility Improvements	Land Acquisition	Total
Intergovernmental	6,321,162	8,749,925	15,071,087
Categorical State Aid	964,912	1,040,300	2,005,212
Fed Aviation Administration	5,356,250	7,709,625	13,065,875
Transfers In	229,228	260,075	489,303
Transfer from Airport Fund	-	64,000	64,000
Transfer from General Fund	229,228	196,075	425,303
Total	6,550,390	9,010,000	15,560,390

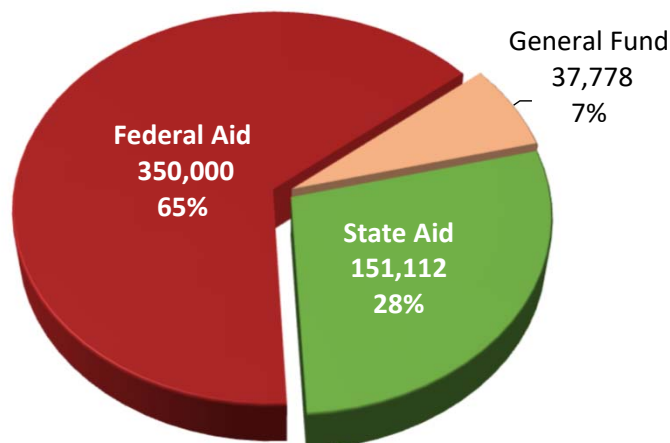
FY22-FY26 Projects Funded by the General Fund

	Facility Improvements	Land Acquisition	Total
East Side Taxiway Parallel	111,250	-	111,250
Land Acquisition and Avigation Easements	-	196,075	196,075
Safety Improvements	117,978	-	117,978
Total	229,228	196,075	425,303

FY22 Projects by Project Type

	Year 1
Facility Improvements	
Safety Improvements	538,890
Total	538,890

FY22 Airport CIP Funding Sources



East Side Taxiway Parallel

DEPARTMENT

Airport CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Airport

LOCATION

Hanover County Airport

PROJECT DESCRIPTION

Design and construction of an extended parallel taxiway on the East side. The first section was constructed during the Airport Phase I & II East Side Development. The full length is needed to conform to FAA Category B-II Design Standards in accordance with the approved Airport Master Plan to achieve desired wing-tip clearance.

USEFUL LIFE

20 years

TIMETABLE

Environmental assessment and design in FY25 (Year 4); Construction in FY26 (Year 5)

OPERATING IMPACT

Electrical taxiway lighting

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	562,500	5,000,000	5,562,500
Categorical State Aid	-	-	-	45,000	400,000	445,000
Fed Aviation Administration	-	-	-	506,250	4,500,000	5,006,250
Transfer from General Fund	-	-	-	11,250	100,000	111,250
Funding Uses	-	-	-	562,500	5,000,000	5,562,500
Construction	-	-	-	-	5,000,000	5,000,000
Professional Services	-	-	-	562,500	-	562,500
Operating Impact	-	-	-	-	1,200	1,200
Electrical Services	-	-	-	-	1,200	1,200

Land Acquisition and Avigation Easements

DEPARTMENT

Airport CIP

PROJECT TYPE

Land Acquisition

FUNCTIONAL AREA

Airport

LOCATION

Hanover County Airport

PROJECT DESCRIPTION

The Airport Master Plan identifies the need to purchase 58 acres of land and avigation easements to the north and east of the runway to meet FAA airport safety criteria. Purchase of this land or easement is required to remove airspace obstructions and complete the east side expansion project. The County will give priority for acquisition of required land when it is on the market.

USEFUL LIFE

N/A

TIMETABLE

Purchase of land or easements beginning in FY24 (Year 3)

OPERATING IMPACT

Increased operational costs are not anticipated

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	8,566,250	443,750	-	9,010,000
Categorical State Aid	-	-	685,300	355,000	-	1,040,300
Fed Aviation Administration	-	-	7,709,625	-	-	7,709,625
Transfer from Airport Fund	-	-	64,000	-	-	64,000
Transfer from General Fund	-	-	107,325	88,750	-	196,075
Funding Uses	-	-	8,566,250	443,750	-	9,010,000
Land Purch & Development Addtl	-	-	8,566,250	443,750	-	9,010,000

Safety Improvements

DEPARTMENT

Airport CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Airport

LOCATION

Hanover County Airport

PROJECT DESCRIPTION

Airport safety improvements include construction for milling and resurfacing the runway and overlaying of the original ramp apron in FY22 (Year 1), as well as installing omni-directional approach lighting for Runway 16 and precision approach path indicator (PAPI) lights for Runway 34 in FY23 (Year 2).

USEFUL LIFE

20 years

TIMETABLE

Construction in FY22 (Year 1) and FY23 (Year 2)

OPERATING IMPACT

Increased operational costs are not anticipated

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	538,890	449,000	-	-	-	987,890
Categorical State Aid	151,112	368,800	-	-	-	519,912
Fed Aviation Administration	350,000	-	-	-	-	350,000
Transfer from General Fund	37,778	80,200	-	-	-	117,978
Funding Uses	538,890	449,000	-	-	-	987,890
Alt to Facility or Office	538,890	449,000	-	-	-	987,890

County Improvements Fund Summary

FY22-FY26 Funding Sources by Project Type

	Construction	Equipment	Facility Improvements	Reserve	Roads & Public Works	Technology	Vehicles	Total
Local Revenue	-	-	-	3,500,000	46,716,300	-	-	50,216,300
Reserve for Revenue Transfers	-	-	-	3,500,000	-	-	-	3,500,000
Sales & Fuel Tax	-	-	-	-	43,616,300	-	-	43,616,300
Traffic Contribution	-	-	-	-	3,100,000	-	-	3,100,000
Long-term Debt	7,100,000	-	6,500,000	-	-	-	-	13,600,000
Bond Proceeds	7,100,000	-	6,500,000	-	-	-	-	13,600,000
Intergovernmental	-	-	-	-	27,073,531	-	-	27,073,531
Categorical State Aid	-	-	-	-	3,309,090	-	-	3,309,090
Fed FHWA Grant	-	-	-	-	16,732,298	-	-	16,732,298
State VDOT	-	-	-	-	7,032,143	-	-	7,032,143
Use of Planned Surpluses	-	-	-	-	575,417	-	-	575,417
PYB Proffers Road	-	-	-	-	575,417	-	-	575,417
Transfers In	815,000	5,334,806	12,650,000	-	4,600,000	13,090,000	13,439,000	49,928,806
Transfer fr GF FBA Stormwater	-	-	-	-	750,000	-	-	750,000
Transfer from General Fund	815,000	5,244,806	5,650,000	-	2,850,000	12,740,000	13,267,000	40,566,806
Transfer from GF - FBA Capital	-	90,000	7,000,000	-	-	350,000	172,000	7,612,000
Transfer GF FBA Transportation	-	-	-	-	1,000,000	-	-	1,000,000
Total	7,915,000	5,334,806	19,150,000	3,500,000	78,965,248	13,090,000	13,439,000	141,394,054

FY22-FY26 Functional Areas by Project Type

	Construction	Equipment	Facility Improvements	Reserve	Roads & Public Works	Technology	Vehicles	Total
General Government	-	450,000	-	-	-	9,540,000	-	9,990,000
Parks, Recreation & Cultural	-	-	3,005,000	-	-	-	-	3,005,000
Public Safety	7,915,000	3,650,000	-	-	-	3,250,000	11,579,000	26,394,000
Public Works	-	1,234,806	11,595,000	-	78,965,248	300,000	1,860,000	93,955,054
Judicial Administration	-	-	4,550,000	-	-	-	-	4,550,000
Nondepartmental	-	-	-	3,500,000	-	-	-	3,500,000
Total	7,915,000	5,334,806	19,150,000	3,500,000	78,965,248	13,090,000	13,439,000	141,394,054

FY22-FY26 Projects Funded by Long-term Debt

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
County Facility Construction/Renovation	-	-	-	-	4,000,000	4,000,000
Fire Station #17	600,000	6,500,000	-	-	-	7,100,000
Park/Cultural Development	-	-	-	-	2,500,000	2,500,000
Total	600,000	6,500,000	-	-	6,500,000	13,600,000

Board Room Video System Replacement

DEPARTMENT

Board of Supervisors

PROJECT TYPE

Equipment

FUNCTIONAL AREA

General Government

LOCATION

Administration Building

PROJECT DESCRIPTION

As technology has advanced, the streaming of Board of Supervisor meetings has become necessary. Other meetings such as the Planning Commission, School Board and Board committees are also being streamed on a regular basis. Online viewership of these meetings has hit record numbers. The technology in place in the Board Room is not capable of providing a guaranteed video streaming experience. It relies too heavily on internet connectivity and hosted web solutions. The County needs to upgrade the board room system to a tier one system that is based on cable TV technology.

USEFUL LIFE

20 years

TIMETABLE

Implemented within 12 months of funding availability.

OPERATING IMPACT

System maintenance fees required beginning in FY26 (Year 5)

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	450,000	-	450,000
Transfer from General Fund	-	-	-	450,000	-	450,000
Funding Uses	-	-	-	450,000	-	450,000
Software Services	-	-	-	450,000	-	450,000
Operating Impact	-	-	-	-	50,000	50,000
Software Services	-	-	-	-	50,000	50,000

Courtroom Renovation

DEPARTMENT

Circuit Court

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Judicial Administration

LOCATION

Courthouse

PROJECT DESCRIPTION

During the design phase of the Courthouse, the decision was made to include an unfinished space on the upper level to allow for growth and the construction of additional courtrooms. This project is a continuation of that plan to finish the space that is available for use. A study will be conducted to help select the best use of the space to help meet the growing demand of the courts.

USEFUL LIFE

20 to 30 years

TIMETABLE

Construction to begin in FY22 (Year 1) with anticipated completion in FY23 (Year 2).

OPERATING IMPACT

Potential changes in operational costs are not yet quantified. Costs will vary based on final design of the renovated facilities.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	4,550,000	-	-	-	-	4,550,000
Transfer from General Fund	4,550,000	-	-	-	-	4,550,000
Funding Uses	4,550,000	-	-	-	-	4,550,000
Alt to Facility or Office	4,500,000	-	-	-	-	4,500,000
Professional Services	50,000	-	-	-	-	50,000

Public Safety Microwave Radio Replacement

DEPARTMENT

Emergency Communications

PROJECT TYPE

Equipment

FUNCTIONAL AREA

Public Safety

LOCATION

Emergency Communications Center

PROJECT DESCRIPTION

Replace the current microwave radio system software and hardware, including microwave radio indoor and outdoor units, dehydrators, direct current (DC) power plant, equipment spares and a fault monitoring solution. The current microwave system was implemented in 2008 as part of Hanover County’s new countywide radio system. The microwave system provides highly reliable and redundant connectivity between communication systems and allows simulcast voice and data transmissions across the trunked radio system. The current family of microwave radios are longer in production and maintenance support is entering a 'best effort' phase based on end-of-life parts availability. The reliability and performance of the radio system is reliant on the performance of the microwave system. This project is necessary to ensure that mission communications between public safety responders are efficient and effective.

USEFUL LIFE

Major upgrades necessary every 15 to 20 years

TIMETABLE

Equipment replacement to begin in FY25 (Year 4) with anticipated completion in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	900,000	-	900,000
Transfer from General Fund	-	-	-	900,000	-	900,000
Funding Uses	-	-	-	900,000	-	900,000
Communications Equipment Repl	-	-	-	900,000	-	900,000

Public Safety Software Upgrade

DEPARTMENT

Emergency Communications

PROJECT TYPE

Technology

FUNCTIONAL AREA

Public Safety

LOCATION

Emergency Communications Center

PROJECT DESCRIPTION

Upgrade or replace computer aided dispatch (CAD) hardware and software, mobile apps, high availability solution, connectivity improvements, data analytics, extended agency inclusion, mobile device management and routable streets.

This project will be completed in coordination with the Sheriff's Office Records Management System & Mobile Client Replacement.

USEFUL LIFE

Major software upgrades necessary every 5 to 7 years

TIMETABLE

Project to begin in FY23 (Year 2) with a two year implementation process to conclude in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	1,250,000	-	-	-	1,250,000
Transfer from General Fund	-	1,250,000	-	-	-	1,250,000
Funding Uses	-	1,250,000	-	-	-	1,250,000
Software Repl	-	1,250,000	-	-	-	1,250,000

Decontamination Trailer

DEPARTMENT

Fire-EMS

PROJECT TYPE

Vehicles

FUNCTIONAL AREA

Public Safety

LOCATION

Fire-EMS Administration

PROJECT DESCRIPTION

Purchase a trailer equipped with independent shower stalls that would be used for radiological emergencies and routine decontamination following structure fires.

USEFUL LIFE

15 years

TIMETABLE

Purchase in FY22 (Year 1)

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	72,000	-	-	-	-	72,000
Transfer from GF - FBA Capital	72,000	-	-	-	-	72,000
Funding Uses	72,000	-	-	-	-	72,000
Motor Vehicle & Equip Addtl	72,000	-	-	-	-	72,000

Diesel Exhaust Removal System

DEPARTMENT

Fire-EMS

PROJECT TYPE

Equipment

FUNCTIONAL AREA

Public Safety

LOCATION

Fire-EMS Stations

PROJECT DESCRIPTION

Install diesel exhaust removal systems in fire stations. Exhaust removal systems work to protect firefighter and EMS personnel from the dangers of breathing diesel exhaust. The system is intended to minimize exposure to known carcinogens and particulates that cause lung cancer. The system will meet and exceed industry standard requirements.

USEFUL LIFE

Varies based upon the vehicle.

TIMETABLE

Install one station in FY22 (Year 1), two stations each in FY24 (Year 3) and FY26 (Year 6)

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	90,000	-	180,000	-	180,000	450,000
Transfer from General Fund	-	-	180,000	-	180,000	360,000
Transfer from GF - FBA Capital	90,000	-	-	-	-	90,000
Funding Uses	90,000	-	180,000	-	180,000	450,000
Alt to Facility or Office	90,000	-	180,000	-	180,000	450,000

Fire Engine & Heavy Rescue Replacement

DEPARTMENT

Fire-EMS

PROJECT TYPE

Vehicles

FUNCTIONAL AREA

Public Safety

LOCATION

Fire-EMS Stations

PROJECT DESCRIPTION

The County operates front-line engines out of all stations and maintains reserves for use when needed. The fire apparatus fleet also includes front-line and reserve ladder trucks, heavy rescue units, an air utility vehicle with trailer, brush trucks, first response units and a mobile command unit. The engines in this rotation are the first-line engines for fire and medical response from County fire stations. They have a capacity of 750 gallons of water, 2,000 gallon per minute pump, 2,000 feet of assorted hose, breathing apparatus and the capability of transporting 6 firefighters to emergency scenes.

USEFUL LIFE

Varies based upon the vehicle: engines - 20 years; ladder trucks and heavy rescue units - 15 years; tankers - 20 years; brush trucks - 20 years; Fire Marshal vehicles - 7 years; command vehicles - 4 years

TIMETABLE

Annual purchases in accordance with the 20-year apparatus replacement plan.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	1,200,000	1,797,000	1,370,000	1,370,000	1,820,000	7,557,000
Transfer from General Fund	1,200,000	1,797,000	1,370,000	1,370,000	1,820,000	7,557,000
Funding Uses	1,200,000	1,797,000	1,370,000	1,370,000	1,820,000	7,557,000
Fire Trucks & Ambulances Repl	1,200,000	1,797,000	1,370,000	1,370,000	1,820,000	7,557,000

Fire Prevention Safety House Replacement

DEPARTMENT

Fire-EMS

PROJECT TYPE

Vehicles

FUNCTIONAL AREA

Public Safety

LOCATION

Fire-EMS Administration

PROJECT DESCRIPTION

Replace the current fire prevention safety house. The fire safety house is an educational tool used to teach fire prevention and fire survival in an interactive environment. It allows children to practice exiting techniques in a simulated smoke filled environment.

USEFUL LIFE

10 years

TIMETABLE

Purchase in FY24 (Year 3)

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	150,000	-	-	150,000
Transfer from General Fund	-	-	150,000	-	-	150,000
Funding Uses	-	-	150,000	-	-	150,000
Motor Vehicle & Equipment Rep	-	-	150,000	-	-	150,000

Fire Station #17

DEPARTMENT

Fire-EMS

PROJECT TYPE

Construction

FUNCTIONAL AREA

Public Safety

LOCATION

Laurel Meadow area

PROJECT DESCRIPTION

Construct a new, 17th fire station in the Laurel Meadow area of the Pole Green and Lee Davis corridor. Current data shows an increased service demand in this area consistent with local growth. This project also includes funding for an engine in FY22 (Year 1) in anticipation of opening the new station. Personnel funded through a SAFER grant are currently operating on a reserve engine.

USEFUL LIFE

35 years

TIMETABLE

Engine purchase in FY22 (Year 1); Station design and engineering in FY22 (Year 1); Station construction in FY23 (Year 2).

OPERATING IMPACT

Potential changes in operational costs are not yet quantified. Costs will vary based on final design of the new station.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	1,415,000	6,500,000	-	-	-	7,915,000
Bond Proceeds	600,000	6,500,000	-	-	-	7,100,000
Transfer from General Fund	815,000	-	-	-	-	815,000
Funding Uses	1,415,000	6,500,000	-	-	-	7,915,000
Construction	-	6,500,000	-	-	-	6,500,000
Motor Vehicle & Equip Addtl	815,000	-	-	-	-	815,000
Professional Services	600,000	-	-	-	-	600,000

Mobile Command Replacement

DEPARTMENT

Fire-EMS

PROJECT TYPE

Vehicles

FUNCTIONAL AREA

Public Safety

LOCATION

Fire-EMS Administration

PROJECT DESCRIPTION

Replace the current mobile command vehicle. The mobile command vehicle supports the management and coordination of tactical units for fire fighting and disaster operations. This vehicle is an indispensable instrument for controlling and mastering difficult operational situations in a manageable and organized fashion. The current vehicle was partly funded with grants, the County is hopeful to secure a grant to assist with the replacement.

USEFUL LIFE

15 years

TIMETABLE

Purchase in FY26 (Year 5)

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	400,000	400,000
Transfer from General Fund	-	-	-	-	400,000	400,000
Funding Uses	-	-	-	-	400,000	400,000
Motor Vehicle & Equipment Rep	-	-	-	-	400,000	400,000

Station Alerting System Upgrade

DEPARTMENT

Fire-EMS

PROJECT TYPE

Equipment

FUNCTIONAL AREA

Public Safety

LOCATION

Fire-EMS Stations

PROJECT DESCRIPTION

The station alerting system is the method used to inform firefighters of an emergency call 24 hours a day. The current system is based on 1950’s technology that broadcasts tones in real time for each unit to respond. This can create a delay in response, as it is common for multiple units to respond to serious incidents. The older technology is also subject to failure, which is unacceptable in emergency services. The replacement system will be capable of alerting all units simultaneously via direct line and will provide a more reliable platform for this critical task. The replacement system will also provide “soft” alerting which improves responder safety and health.

USEFUL LIFE

20 years

TIMETABLE

Installation in FY22 (Year 1)

OPERATING IMPACT

Recurring software maintenance beginning in FY23 (Year 2)

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	1,600,000	-	-	-	-	1,600,000
Transfer from General Fund	1,600,000	-	-	-	-	1,600,000
Funding Uses	1,600,000	-	-	-	-	1,600,000
Communications Equipment Addtl	1,600,000	-	-	-	-	1,600,000
Operating Impact	-	105,000	105,000	105,000	105,000	420,000
Software Services	-	105,000	105,000	105,000	105,000	420,000

Tow Vehicle

DEPARTMENT

Fire-EMS

PROJECT TYPE

Vehicles

FUNCTIONAL AREA

Public Safety

LOCATION

Fire-EMS Administration

PROJECT DESCRIPTION

Purchase a pick-up truck that is rated for towing the department's larger trailers, including the decontamination trailer also funded in FY22 (Year 1).

USEFUL LIFE

10 years

TIMETABLE

Purchase in FY22 (Year 1)

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	50,000	-	-	-	-	50,000
Transfer from GF - FBA Capital	50,000	-	-	-	-	50,000
Funding Uses	50,000	-	-	-	-	50,000
Motor Vehicle & Equip Addtl	50,000	-	-	-	-	50,000

Traffic Preemption

DEPARTMENT

Fire-EMS

PROJECT TYPE

Equipment

FUNCTIONAL AREA

Public Safety

LOCATION

Various VDOT Traffic Intersections

PROJECT DESCRIPTION

Traffic signal preemption provides emergency fire service vehicles with the ability to preempt a traffic signal in order to have a green light in the direction of the responding vehicle. This project will enhance the response of primary apparatus at 40 intersections, resulting in reduced response times and safer responses for both apparatus and the community.

USEFUL LIFE

20 years

TIMETABLE

Install receiver on several intersection signals and apparatus in FY24 (Year 3).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	700,000	-	-	700,000
Transfer from General Fund	-	-	700,000	-	-	700,000
Funding Uses	-	-	700,000	-	-	700,000
Machinery & Equipment Addtl	-	-	700,000	-	-	700,000

Admin Building Center Roof Replacement

DEPARTMENT

General Services

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Public Works

LOCATION

Administration Building

PROJECT DESCRIPTION

Replace the center section of the Administration Building's roof. The current roof is reaching the end of its useful life. This is the largest section of the building's roof. Separate repairs have and will continue to be done on smaller sections to keep roof maintenance up to date.

USEFUL LIFE

20 years

TIMETABLE

Project to be completed in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	150,000	-	150,000
Transfer from General Fund	-	-	-	150,000	-	150,000
Funding Uses	-	-	-	150,000	-	150,000
Alt to Facility or Office	-	-	-	150,000	-	150,000

County Facility Construction/Renovation

DEPARTMENT

General Services

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Public Works

LOCATION

To be determined

PROJECT DESCRIPTION

The County's FY22 operating budget includes a countywide facility study to identify and prioritize construction and renovation needs over the next 10 to 25 years. The study will examine previously requested projects including, at a minimum, fire stations, the CSB RAFT House and the animal shelter.

This CIP project sets aside initial funding to address countywide construction and renovation needs with specific facilities to be identified after completion of the study.

USEFUL LIFE

20 years

TIMETABLE

Funding available beginning in FY24 (Year 3).

OPERATING IMPACT

Changes in operational costs will be determined as specific facility improvements are identified.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	4,000,000	-	4,000,000	8,000,000
Bond Proceeds	-	-	-	-	4,000,000	4,000,000
Transfer from GF - FBA Capital	-	-	4,000,000	-	-	4,000,000
Funding Uses	-	-	4,000,000	-	4,000,000	8,000,000
Construction	-	-	4,000,000	-	4,000,000	8,000,000

Courthouse Secured Parking

DEPARTMENT

General Services

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Public Works

LOCATION

Courthouse

PROJECT DESCRIPTION

Expand parking capacity in the secured parking area for Sheriff and Court Services personnel.

USEFUL LIFE

20 years

TIMETABLE

Project to be completed in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	75,000	75,000
Transfer from General Fund	-	-	-	-	75,000	75,000
Funding Uses	-	-	-	-	75,000	75,000
Alt to Facility or Office	-	-	-	-	75,000	75,000

Fire-EMS Generator Replacement

DEPARTMENT

General Services

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Public Works

LOCATION

Fire-EMS Stations

PROJECT DESCRIPTION

Replace and upgrade existing aging generators at fire stations. Existing generators are sized only for partial facility power. Stations now house crews 24 hours a day and need full operational capacity during power outages. Upgraded generators will meet these needs.

USEFUL LIFE

20 years

TIMETABLE

Replace one station generator every other year.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	60,000	-	60,000	-	60,000	180,000
Transfer from General Fund	60,000	-	60,000	-	60,000	180,000
Funding Uses	60,000	-	60,000	-	60,000	180,000
Building Accessory Equip Repl	60,000	-	60,000	-	60,000	180,000

Fleet & Facilities Software Systems Replacement

DEPARTMENT

General Services

PROJECT TYPE

Technology

FUNCTIONAL AREA

Public Works

LOCATION

Fleet Building and Facilities Management

PROJECT DESCRIPTION

Replace the current software systems used by General Services Fleet and Facilities divisions. The existing fleet software system has been in use since 1996. The current facilities software system has been in use for 10+ years and lacks user-friendly reporting and data collection features. The selected replacement system(s) will be web-based with enhanced reporting capabilities.

USEFUL LIFE

10 years

TIMETABLE

Project to be completed in FY24 (Year 3).

OPERATING IMPACT

Recurring software maintenance beginning in FY25 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	300,000	-	-	300,000
Transfer from General Fund	-	-	300,000	-	-	300,000
Funding Uses	-	-	300,000	-	-	300,000
Software Repl	-	-	300,000	-	-	300,000
Operating Impact	-	-	-	5,000	5,000	10,000
Software Services	-	-	-	5,000	5,000	10,000

General Vehicle Replacement

DEPARTMENT
General Services

PROJECT TYPE
Vehicles

FUNCTIONAL AREA
Public Works

LOCATION
Countywide

PROJECT DESCRIPTION

Replace vehicles as required to maintain the County's fleet. This project will replace vehicles based on factors including estimated maintenance costs, mileage and age.

This project includes funding to replace vans with wheelchair lifts serving the CSB's RAFT House in FY22 (Year 1) and Day Health and Rehabilitation program in FY25 (Year 4). The previous van supporting the RAFT House is inoperable and not repairable. It transports over 2,600 clients and staff per year. The current van supporting Day Health was purchased in 2007 and has a projected useful life of 18 to 20 years.

USEFUL LIFE

Varies based upon the vehicle. Most vehicles are 7 to 10 years.

TIMETABLE

Annual purchase of vehicles.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	420,000	340,000	340,000	420,000	340,000	1,860,000
Transfer from General Fund	420,000	340,000	340,000	420,000	340,000	1,860,000
Funding Uses	420,000	340,000	340,000	420,000	340,000	1,860,000
Motor Vehicle & Equipment Rep	420,000	340,000	340,000	420,000	340,000	1,860,000

Human Services Complex Boiler Replacement

DEPARTMENT

General Services

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Public Works

LOCATION

Human Services Complex

PROJECT DESCRIPTION

Replace the boiler in the Human Services Complex. The current boiler has been re-tubed once and is reaching the end of its useful life.

USEFUL LIFE

20 years

TIMETABLE

Project to be completed in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	55,000	-	55,000
Transfer from General Fund	-	-	-	55,000	-	55,000
Funding Uses	-	-	-	55,000	-	55,000
Building Accessory Equip Repl	-	-	-	55,000	-	55,000

Vaughan-Bradley Roof Replacement

DEPARTMENT

General Services

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Public Works

LOCATION

Vaughan-Bradley Building

PROJECT DESCRIPTION

Replace the roof of the Vaughan-Bradley Building. The current ballasted roof system has received repairs in areas of heavy traffic due to communication and HVAC equipment installation. The replacement roof will be the same type of Ethylene Propylene Diene Monomer (EPDM) material. Roof gutters will also be relined with EPDM as part of the total roof replacement.

USEFUL LIFE

20 years

TIMETABLE

Project to be completed in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	135,000	-	135,000
Transfer from General Fund	-	-	-	135,000	-	135,000
Funding Uses	-	-	-	135,000	-	135,000
Alt to Facility or Office	-	-	-	135,000	-	135,000

Wickham Renovations

DEPARTMENT

General Services

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Public Works

LOCATION

Wickham Building

PROJECT DESCRIPTION

Continue phased renovation of the Wickham Building and Wickham Annex. The multi-story front section of the Wickham Building and portions of the center single-story section of the Wickham Building are planned for renovation in two phases for use by the Department of Information Technology (IT). Phase I, the IT data center, has been previously funded and is expected to be completed in FY21. FY22 (Year 1) includes additional funding for Phase II, the multi-story front section of Wickham Building, as well as for evaluation to determine the best disposition and use of the remaining single-story section of the Wickham Building and the Wickham Annex. Additional phases may be necessary to allow renovations or demolition if required renovations are not cost effective.

USEFUL LIFE

20 years

TIMETABLE

Previously-funded Phase I (IT data center) to be completed in FY21. Phase II (multi-story front section of Wickham Building) to be completed in FY22 (Year 1) & FY23 (Year 2)

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	3,000,000	-	-	-	-	3,000,000
Transfer from GF - FBA Capital	3,000,000	-	-	-	-	3,000,000
Funding Uses	3,000,000	-	-	-	-	3,000,000
Alt to Facility or Office	3,000,000	-	-	-	-	3,000,000

Computer Replacement Program

DEPARTMENT

Information Technology

PROJECT TYPE

Technology

FUNCTIONAL AREA

General Government

LOCATION

Countywide

PROJECT DESCRIPTION

This program allows for the replacement of computers when they are no longer functioning in an efficient manner. Computers that are not assigned for full-time use (conference rooms, spares, interns, etc.) are recycled as other computers are replaced. Funds have been maximized by adjusting warranty periods as appropriate while still providing maximum usability and performance for the County workforce. These funds do not replace public safety mobile data computers or any computers in Public Utilities, the Department of Social Services or the Pamunkey Regional Jail.

USEFUL LIFE

The target replacement schedule for laptops is 6 years. Desktops are not assigned for full-time use and can go up to 10 years. Communication dispatch computers used for E911 services are replaced every 3-4 years.

TIMETABLE

Annual replacement of computers.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	150,000	150,000	160,000	175,000	200,000	835,000
Transfer from General Fund	150,000	150,000	160,000	175,000	200,000	835,000
Funding Uses	150,000	150,000	160,000	175,000	200,000	835,000
Computer Equip Cyclical Repl	150,000	150,000	160,000	175,000	200,000	835,000

Data Center Firewall

DEPARTMENT

Information Technology

PROJECT TYPE

Technology

FUNCTIONAL AREA

General Government

LOCATION

Wickham Building

PROJECT DESCRIPTION

This project will provide a layer of security to the IT data center as part of the IT Threat Management Program. This is a part of the segmentation of services effort. A firewall is a network security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules. A firewall typically establishes a barrier between a trusted network and an untrusted network.

USEFUL LIFE

Upgrades every 5 years, replacement 15 years.

TIMETABLE

Purchase in FY25 (Year 4), implementation in 6 months.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	125,000	-	125,000
Transfer from General Fund	-	-	-	125,000	-	125,000
Funding Uses	-	-	-	125,000	-	125,000
Information System Equip Addtl	-	-	-	125,000	-	125,000

Data Center Upgrades

DEPARTMENT

Information Technology

PROJECT TYPE

Technology

FUNCTIONAL AREA

General Government

LOCATION

Wickham Building

PROJECT DESCRIPTION

With the new IT data center planned for 2021, these funds will be used for uninterruptable power supply (UPS) battery replacements and other component upgrades and replacements. These are needed to ensure that existing cooling and UPS systems continue to operate properly.

USEFUL LIFE

5 years for UPS batteries, capacitors, filtering circuits, and major components of the cooling system.

TIMETABLE

Enhancements and maintenance to take place in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	75,000	-	-	-	75,000
Transfer from General Fund	-	75,000	-	-	-	75,000
Funding Uses	-	75,000	-	-	-	75,000
Information System Equip Addtl	-	75,000	-	-	-	75,000

Enterprise Licenses

DEPARTMENT

Information Technology

PROJECT TYPE

Technology

FUNCTIONAL AREA

General Government

LOCATION

Countywide

PROJECT DESCRIPTION

The County utilizes enterprise software license agreements to keep and maintain systems with up-to-date software that provides extended functionality, corrections for known issues and key security upgrades. Licenses do not have to be purchased with new computers and the management of licenses are simplified and efficient. This project provides funding for software licensing and product access for all County computers, as well as operating systems for servers, computers and other devices. Funds are also included for SQL Server database instances. The enterprise agreement is renegotiated with the vendor every 3 years.

USEFUL LIFE

Varies based upon the product. All product upgrades are included with the license agreement.

TIMETABLE

Purchase of licenses and services in 3 year periods.

OPERATING IMPACT

The funded amount includes the full annual expenditure. Additional operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	700,000	710,000	720,000	750,000	800,000	3,680,000
Transfer from General Fund	700,000	710,000	720,000	750,000	800,000	3,680,000
Funding Uses	700,000	710,000	720,000	750,000	800,000	3,680,000
Software Services	700,000	710,000	720,000	750,000	800,000	3,680,000

Storage Area Network

DEPARTMENT

Information Technology

PROJECT TYPE

Technology

FUNCTIONAL AREA

General Government

LOCATION

Wickham Building

PROJECT DESCRIPTION

The existing storage area network (SAN) is a combination of appliances, software and equipment that provides storage. The SAN allows multiple system access, which provides more efficient and effective storage than traditional server storage. The SAN provides greater advance fault detection, allowing staff the ability to identify potential issues and correct them before these problems cause catastrophic system failures and service outages. Funding is for data storage growth and system enhancements.

USEFUL LIFE

Storage expansion occurs continually.

TIMETABLE

System capacity enhanced and upgraded annually as data storage needs arise.

OPERATING IMPACT

The funded amount includes the full annual expenditure. Additional operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	175,000	175,000	200,000	200,000	200,000	950,000
Transfer from General Fund	175,000	175,000	200,000	200,000	200,000	950,000
Funding Uses	175,000	175,000	200,000	200,000	200,000	950,000
Small Capital Outlay	175,000	175,000	200,000	200,000	200,000	950,000

Technology Infrastructure

DEPARTMENT	PROJECT TYPE
Information Technology	Technology
FUNCTIONAL AREA	LOCATION
General Government	Countywide

PROJECT DESCRIPTION

Maintain and enhance the County's technology infrastructure. This includes the County's network, Windows server and database infrastructure, as well as the County's security and network protection methods and back-up solutions. Project costs include equipment, software licenses and warranty coverage. These upgrades are required as shifts in technology occur in order to provide current support and warranty coverage, as well as system enhancements. These funds ensure the continuity of operations for all technology services within the County. This project includes hardware to operate infrastructure in County locations.

USEFUL LIFE

Varies based upon the product.

TIMETABLE

Annual purchases for enhancements to major systems and infrastructure.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	800,000	825,000	750,000	750,000	750,000	3,875,000
Transfer from General Fund	800,000	825,000	750,000	750,000	750,000	3,875,000
Funding Uses	800,000	825,000	750,000	750,000	750,000	3,875,000
Information System Equip Addtl	800,000	825,000	750,000	750,000	750,000	3,875,000

Park Enhancements

DEPARTMENT

Parks & Recreation

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Parks, Recreation & Cultural

LOCATION

Various

PROJECT DESCRIPTION

This project provides continued funding for enhancements to current parks. The five-year CIP includes:

- Athletic Field Lighting for Pole Green Park. Replace the outdated lighting system on Pole Green Park multi-purpose field #3 to bring light levels to a point where tournament soccer and lacrosse could be played on this field. Upgraded lighting will also be more efficient. Existing lights were installed in 2000.
- Hard Courts at a park to be identified. Create 3-4 hard courts. Requests for hard courts, specifically pickleball courts, have increased greatly.
- Playground Resurfacing for Pole Green Park and Poor Farm Park playgrounds. The current rubberized surfacing is nearing the end of its 10-15 year lifespan.
- Shelter/Pavilion for Pole Green Park. Construct a shelter/pavilion for the Pole Green Park championship cross country course. National events are held at the site and tournament/event organizers request use of a covered area on site. When not used for events, the pavilion could be rented for public use.

USEFUL LIFE

Varies based upon the enhancement: Athletic Field Lighting - 20 years; Hard Courts - 20 years; Playground Resurfacing - 15 years; Shelter/Pavilion - 25 years

TIMETABLE

Construction in FY23 (Year 2), FY24 (Year 3) and FY26 (Year 5)

OPERATING IMPACT

Athletic Field Lighting – Electrical and repair & maintenance services beginning in FY24 (Year 3).

Hard Courts – Electrical and repair & maintenance services as well as supplies beginning in FY24 (Year 3).

Playground Resurfacing – No operating impact anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	235,000	200,000	-	70,000	505,000
Transfer from General Fund	-	235,000	200,000	-	70,000	505,000
Funding Uses	-	235,000	200,000	-	70,000	505,000
Alterations to Grounds	-	235,000	200,000	-	-	435,000
Construction	-	-	-	-	70,000	70,000
Operating Impact	-	-	1,600	1,600	1,600	4,800
Electrical Services	-	-	800	800	800	2,400
Repair & Maintenance Services	-	-	500	500	500	1,500
Supplies Repair & Maint	-	-	300	300	300	900

**Park Enhancements
Summary by Project**

Project	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Athletic Field Lighting						
Pole Green Park	-	125,000	-	-	-	125,000
Hard Courts						
Location To Be Determined	-	110,000	-	-	-	110,000
Playground Resurfacing						
Pole Green & Poor Farm Parks	-	-	200,000	-	-	200,000
Shelters/Performance Platforms						
Pole Green Park	-	-	-	-	70,000	70,000
Total	-	235,000	200,000	-	70,000	505,000

Park/Cultural Development

DEPARTMENT

Parks & Recreation

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Parks, Recreation & Cultural

LOCATION

To be determined

PROJECT DESCRIPTION

Construct Phase I of a new park in eastern Hanover County. While the site is not yet identified, basic components should include: parking, multipurpose fields (lighted & irrigated), restroom facility, playground, walking trails and maintenance area.

USEFUL LIFE

40+ years

TIMETABLE

Construction in FY26 (Year 5)

OPERATING IMPACT

Operating costs to begin in FY27 or later, outside the scope of the five-year plan. Such costs will include utilities, repair & maintenance, recreation supplies, agricultural supplies, etc.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	2,500,000	2,500,000
Bond Proceeds	-	-	-	-	2,500,000	2,500,000
Funding Uses	-	-	-	-	2,500,000	2,500,000
Construction	-	-	-	-	2,500,000	2,500,000

Roadway Improvements**DEPARTMENT**

Public Works

PROJECT TYPE

Roads & Public Works

FUNCTIONAL AREA

Public Works

LOCATION

Various

PROJECT DESCRIPTION

The County maintains a candidate project list that prioritizes anticipated road needs and reviewed and updated annually by the Roads Committee (<https://www.hanovercounty.gov/489/Roads-Committee>). Hanover County relies heavily on state and federal funding to address its transportation needs. Staff continues to pursue funding for projects based on the Board's adopted Transportation Policy. Funding in the first year of the CIP is detailed by project, whereas the out years are estimates of potential grants which will be identified over time.

The recently-established Central Virginia Transportation Authority (CVTA) is anticipated to be a significant source of funding for regional transportation priorities and Hanover County's local road priorities. This new revenue source is recognized in the budget beginning in FY22 (Year 1) as funding source Sales & Fuel Tax. This funding will help advance the Board's existing road priorities and provide funding for new priorities that will be established through future Board actions after careful review of revenues and needs.

The following projects receive new funding in FY22 (Year 1). For a list of previously-funded projects, consult the Quarterly Road Project Status Report which can be found on the Public Work's web page at <https://www.hanovercounty.gov/816/Roads-and-Transportation>.

- Pole Green Widening – Widen from 2 to 4 lane divided section.
- Atlee Station Widening Phase I – Widen from 2 to 4 lanes from Warren Avenue to Kings Charter Dr.
- US Route 360 / Lee Davis Road – Widen Route 360 to 8 lanes and expand the intersection at Lee Davis.
- Roadway Contingencies – A contingency fund to enable receipt of state and federal funding for secondary roads or other sources that can be used to fund minor adjustments in project budgets.

USEFUL LIFE

N/A

TIMETABLE

Continuous improvements in all years.

OPERATING IMPACT

Increased operational costs are not anticipated.

Roadway Improvements

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	10,072,353	17,828,967	13,491,645	13,610,778	17,052,415	72,056,158
Fed FHWA Grant	1,583,223	6,513,262	2,449,615	2,986,198	3,200,000	16,732,298
PYB Proffers Road	114,980	114,980	114,980	114,980	115,497	575,417
Sales & Fuel Tax	6,228,950	8,517,600	9,473,100	9,609,600	9,787,050	43,616,300
State VDOT	1,145,200	883,125	853,950	500,000	3,649,868	7,032,143
Traffic Contribution	1,000,000	800,000	600,000	400,000	300,000	3,100,000
Transfer GF FBA Transportation	-	1,000,000	-	-	-	1,000,000
Funding Uses	10,072,353	17,828,967	13,491,645	13,610,778	17,052,415	72,056,158
Roadway Mgmt Projects	10,072,353	17,828,967	13,491,645	13,610,778	17,052,415	72,056,158

The following tables shows projects receiving new funding in FY22 (Year 1).

FY22 Project Summary

Summary by Project	Prior Expenditures	Remaining Allocation	FY22 Budget	Future Funding	Total
Pole Green Widening	-	9,663,000	3,925,200	6,947,348	20,535,548
Categorical Federal Aid	-	5,376,000	1,280,000	3,691,798	10,347,798
Categorical State Aid	-	1,987,000	645,200	1,255,550	3,887,750
General Fund	-	1,500,000	-	-	1,500,000
Sales & Fuel Tax	-	-	2,000,000	2,000,000	4,000,000
Proffers	-	800,000	-	-	800,000
Atlee Station Widening Phase I	-	8,974,822	1,114,980	21,439,437	31,529,239
Categorical Federal Aid	-	-	-	8,703,071	8,703,071
Categorical State Aid	-	5,000,000	-	5,339,397	10,339,397
Sales & Fuel Tax	-	-	-	4,836,532	4,836,532
Proffers	-	3,974,822	1,114,980	2,560,437	7,650,239
US Route 360 / Lee Davis Road	7,070,825	9,417,215	303,223	8,689,942	25,481,205
Categorical Federal Aid	5,365,132	8,110,640	303,223	6,257,277	20,036,272
Categorical State Aid	1,705,693	1,079,075	-	481,525	3,266,293
General Fund	-	227,500	-	-	227,500
Sales & Fuel Tax	-	-	-	951,140	951,140
Use of Fund Balance Assignment	-	-	-	1,000,000	1,000,000
Roadway Contingencies	-	-	4,728,950	-	4,728,950
Categorical State Aid	-	-	500,000	-	500,000
Sales & Fuel Tax	-	-	4,228,950	-	4,228,950
Total	7,070,825	28,055,037	10,072,353	37,076,727	82,274,942

Roadway Improvements

FY22 Project Summary

Total Budget By Funding Source	Prior Expenditures	Remaining Allocation	FY22 Budget	Future Funding	Total
Categorical Federal Aid	5,365,132	13,486,640	1,583,223	18,652,146	39,087,141
Categorical State Aid	1,705,693	8,066,075	1,145,200	7,076,472	17,993,440
General Fund	-	1,727,500	-	-	1,727,500
Sales & Fuel Tax	-	-	6,228,950	7,787,672	14,016,622
Proffers	-	4,774,822	1,114,980	2,560,437	8,450,239
Use of Fund Balance Assignment	-	-	-	1,000,000	1,000,000
Total	7,070,825	28,055,037	10,072,353	37,076,727	82,274,942

Stormwater Program

DEPARTMENT

Public Works

PROJECT TYPE

Roads & Public Works

FUNCTIONAL AREA

Public Works

LOCATION

Countywide for MS4 Permit Compliance;
Suburban Service Area for nutrient reductions

PROJECT DESCRIPTION

This program includes projects for nutrient reductions that assist the County in meeting the requirements of the State's Municipal Separate Storm Sewer System (MS4) General Permit including the Chesapeake Bay Total Maximum Daily Load. Stream restorations, stormwater pond upgrades and other nutrient reducing projects will be completed to protect the environment, solve local erosion problems and meet the Chesapeake Bay Total Maximum Daily Load (TMDL) stormwater requirements. As a condition of the County's MS4 permit, the County is required to reduce pollutants from previously developed lands. A special condition in the MS4 permit requires the County to develop and implement a Chesapeake Bay TMDL action plan to reduce pollutants discharged from the County's public storm sewer system. The State requires localities to address 35% of the required reduction in the second 5-year permit cycle (FY19-FY23) and the remaining 60% reductions in the third 5-year cycle (FY24-FY28). This portion of the Stormwater Program includes funding through grant and matching Stormwater Local Assistance Funding (SLAF). Project locations are reviewed and initiated based on nutrient reductions and cost efficiency in conjunction with community benefit. This project includes modifying and upgrading stormwater facilities to reduce sediment, phosphorus and nitrogen and addressing other applicable TMDL requirements. Funding from the General Fund is to address projected needs in the second permit cycle and beyond.

USEFUL LIFE

N/A

TIMETABLE

Nutrient reduction projects completed annually.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	1,000,000	1,000,000	2,909,090	1,000,000	1,000,000	6,909,090
Categorical State Aid	500,000	500,000	1,309,090	500,000	500,000	3,309,090
Transfer fr GF FBA Stormwater	250,000	-	500,000	-	-	750,000
Transfer from General Fund	250,000	500,000	1,100,000	500,000	500,000	2,850,000
Funding Uses	1,000,000	1,000,000	2,909,090	1,000,000	1,000,000	6,909,090
Stormwater Management Projects	1,000,000	1,000,000	2,909,090	1,000,000	1,000,000	6,909,090

Solid Waste Equipment Replacement

DEPARTMENT

Public Works Operations

PROJECT TYPE

Equipment

FUNCTIONAL AREA

Public Works

LOCATION

Convenience Centers & County Transfer Station

PROJECT DESCRIPTION

Funding used to purchase replacement equipment to handle solid waste at the County solid waste convenience centers, transfer station and waste-to-compost. This is necessary to maintain a viable fleet of solid waste handling equipment. Aging equipment will be taken out of service and replaced with more modern and reliable equipment. Acquisition of new equipment will provide for more efficient operations with less maintenance and repair downtime.

USEFUL LIFE

Varies based upon the equipment: Hooklift Truck - 15 years; Wheeled Loader - 20 years; Road Tractor - 25 years; Transfer Trailer - 30 years; Scales - 40 years

TIMETABLE

FY22 (Year 1) - Scales Rebuild and Hooklift Truck; FY23 (Year 2) - Hooklift Truck; FY24 (Year 3) - Road Tractor and Wheeled Loader; FY25 (Year 4) - Hooklift Truck and Transfer Trailers; FY26 (Year 5) - Hooklift Truck.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	151,160	154,200	400,000	355,850	173,596	1,234,806
Transfer from General Fund	151,160	154,200	400,000	355,850	173,596	1,234,806
Funding Uses	151,160	154,200	400,000	355,850	173,596	1,234,806
Machinery & Equipment Repl	151,160	154,200	400,000	355,850	173,596	1,234,806

Records Management System Replacement

DEPARTMENT

Sheriff

PROJECT TYPE

Technology

FUNCTIONAL AREA

Public Safety

LOCATION

Vaughan-Bradley Building

PROJECT DESCRIPTION

Replace the current records management system (RMS) and mobile software for field reporting. This project is anticipated to include software, hardware, mobile apps, data conversion, reporting, interfaces, high availability solution, connectivity improvements, training, project management, data analytics, extended agency inclusion, mobile device management and routable streets.

This project will be completed in coordination with the Emergency Communications Public Safety Software Update.

USEFUL LIFE

15 to 20 years

TIMETABLE

Project to begin in FY23 (Year 2) with a one year implementation process to conclude in FY24 (Year 3).

OPERATING IMPACT

Recurring software maintenance beginning in FY24 (Year 3).

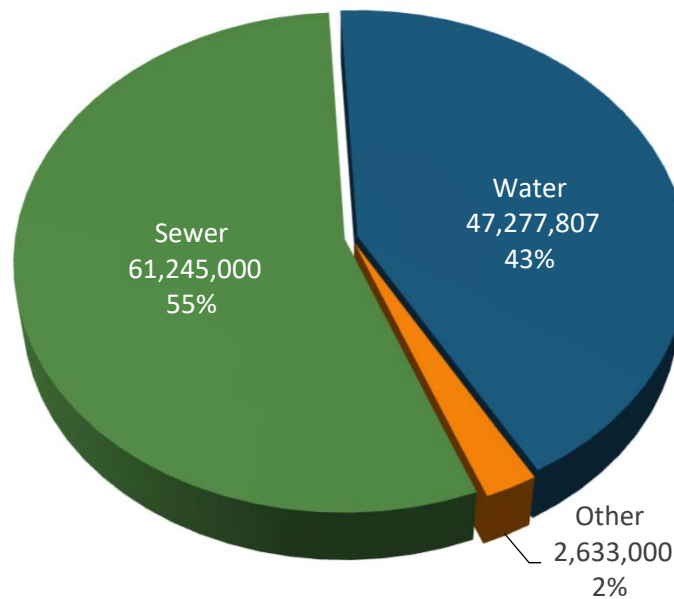
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	2,000,000	-	-	-	2,000,000
Transfer from General Fund	-	1,650,000	-	-	-	1,650,000
Transfer from GF - FBA Capital	-	350,000	-	-	-	350,000
Funding Uses	-	2,000,000	-	-	-	2,000,000
Software Repl	-	2,000,000	-	-	-	2,000,000
Operating Impact	-	-	135,000	135,000	135,000	405,000
Maintenance Service Contracts	-	-	135,000	135,000	135,000	405,000

Public Utilities CIP Fund Summary

FY22-FY26 Project Type by Category

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
PU CIP Other	525,000	1,340,000	310,000	176,000	282,000	2,633,000
Construction	-	960,000	-	-	-	960,000
Equipment	-	115,000	-	-	-	115,000
Facility Improvements	-	-	-	-	92,000	92,000
Technology	250,000	-	-	-	-	250,000
Vehicles	275,000	265,000	310,000	176,000	190,000	1,216,000
PU CIP Sewer	4,386,000	16,250,000	13,295,000	12,866,000	14,448,000	61,245,000
Equipment	88,000	-	-	-	-	88,000
Land Acquisition	-	-	-	-	500,000	500,000
Utility Infrastructure	4,298,000	16,250,000	13,295,000	12,866,000	13,948,000	60,657,000
PU CIP Water	13,419,649	8,812,778	9,950,211	9,703,661	5,391,508	47,277,807
Utility Infrastructure	9,968,000	1,055,000	2,719,000	4,752,000	3,581,000	22,075,000
Utility Service Agreement	3,451,649	7,757,778	7,231,211	4,951,661	1,810,508	25,202,807
Total	18,330,649	26,402,778	23,555,211	22,745,661	20,121,508	111,155,807

**FY22-FY26 Public Utilities CIP
by Category**



Asset Management System

DEPARTMENT
 PU CIP Other

PROJECT TYPE
 Technology

FUNCTIONAL AREA
 Public Utilities

LOCATION
 N/A

PROJECT DESCRIPTION

This project is the purchase of an asset management system to assist Public Utilities with activities related to the management, planning and budgeting of maintenance activities for its water distribution system and wastewater collection system.

USEFUL LIFE
 20 years

TIMETABLE
 Purchase system in FY22 (Year 1).

OPERATING IMPACT
 Recurring system maintenance costs beginning in FY23 (Year 2).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	250,000	-	-	-	-	250,000
Transfer from Public Utilities	250,000	-	-	-	-	250,000
Funding Uses	250,000	-	-	-	-	250,000
Information System Equip Addtl	250,000	-	-	-	-	250,000
Operating Impact	-	30,000	30,000	30,000	30,000	120,000
Software Services	-	30,000	30,000	30,000	30,000	120,000

Bruce Center Addition

DEPARTMENT

PU CIP Other

PROJECT TYPE

Construction

FUNCTIONAL AREA

Public Utilities

LOCATION

James T. Bruce Operations Center

PROJECT DESCRIPTION

This project is for the construction of additional space for equipment and vehicles at the James T. Bruce Operations Center.

USEFUL LIFE

40 years

TIMETABLE

Design and construction in FY23 (Year 2).

OPERATING IMPACT

Recurring facility costs beginning in FY24 (Year 3).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	960,000	-	-	-	960,000
Transfer from Public Utilities	-	960,000	-	-	-	960,000
Funding Uses	-	960,000	-	-	-	960,000
Construction	-	864,000	-	-	-	864,000
Professional Services	-	96,000	-	-	-	96,000
Operating Impact	-	-	5,000	5,000	5,000	15,000
R&M Svcs - Facilities	-	-	5,000	5,000	5,000	15,000

Bruce Center Exterior Painting

DEPARTMENT

PU CIP Other

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Public Utilities

LOCATION

James T. Bruce Operations Center

PROJECT DESCRIPTION

This project provides for the repainting of the exterior of the James T. Bruce Operations Center.

USEFUL LIFE

20 years

TIMETABLE

Painting in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	92,000	92,000
Transfer from Public Utilities	-	-	-	-	92,000	92,000
Funding Uses	-	-	-	-	92,000	92,000
Alt to Facility or Office	-	-	-	-	92,000	92,000

Maintenance Equipment Replacement

DEPARTMENT

PU CIP Other

PROJECT TYPE

Equipment

FUNCTIONAL AREA

Public Utilities

LOCATION

James T. Bruce Operations Center

PROJECT DESCRIPTION

Purchase maintenance equipment: FY23 (Year 2) - new sewer easement closed circuit television (CCTV) system.

USEFUL LIFE

10 to 20 years

TIMETABLE

Equipment purchase in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	115,000	-	-	-	115,000
Transfer from Public Utilities	-	115,000	-	-	-	115,000
Funding Uses	-	115,000	-	-	-	115,000
Machinery & Equipment Addtl	-	115,000	-	-	-	115,000

Maintenance Vehicle Replacement

DEPARTMENT
 PU CIP Other

PROJECT TYPE
 Vehicles

FUNCTIONAL AREA
 Public Utilities

LOCATION
 Countywide

PROJECT DESCRIPTION

Purchase of maintenance vehicles: FY22 (Year 1) - replace dump truck (\$180K) & new mini excavator & trailer (\$95K); FY23 (Year 2) - new utility body truck (\$65K), replace construction utility body diesel truck (\$120k) & replace utility body truck (\$80K); FY24 (Year 3) - replace crane truck (\$310k); FY25 (Year 4) - replace construction utility body diesel truck (\$122K) & replace diesel 3/4 ton utility body truck (\$54K); FY26 (Year 5) - replace cut away van (\$110K) & replace forklift (\$80K).

USEFUL LIFE
 10 years

TIMETABLE
 Annual purchase of vehicles.

OPERATING IMPACT
 Recurring vehicle maintenance costs beginning in FY26 (Year 5).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	275,000	265,000	310,000	176,000	190,000	1,216,000
Transfer from Public Utilities	275,000	265,000	310,000	176,000	190,000	1,216,000
Funding Uses	275,000	265,000	310,000	176,000	190,000	1,216,000
Motor Vehicle & Equip Addtl	95,000	65,000	-	-	-	160,000
Motor Vehicle & Equipment Repl	180,000	200,000	310,000	176,000	190,000	1,056,000
Operating Impact	-	-	-	-	1,500	1,500
Supplies Veh & Pwr Equip Fleet	-	-	-	-	1,500	1,500

Academy Creek Parallel Trunk Sewer

DEPARTMENT
 PU CIP Sewer

PROJECT TYPE
 Utility Infrastructure

FUNCTIONAL AREA
 Public Utilities

LOCATION
 Parallel to Totopotomoy Creek; North of the Bell Creek Subdivision

PROJECT DESCRIPTION

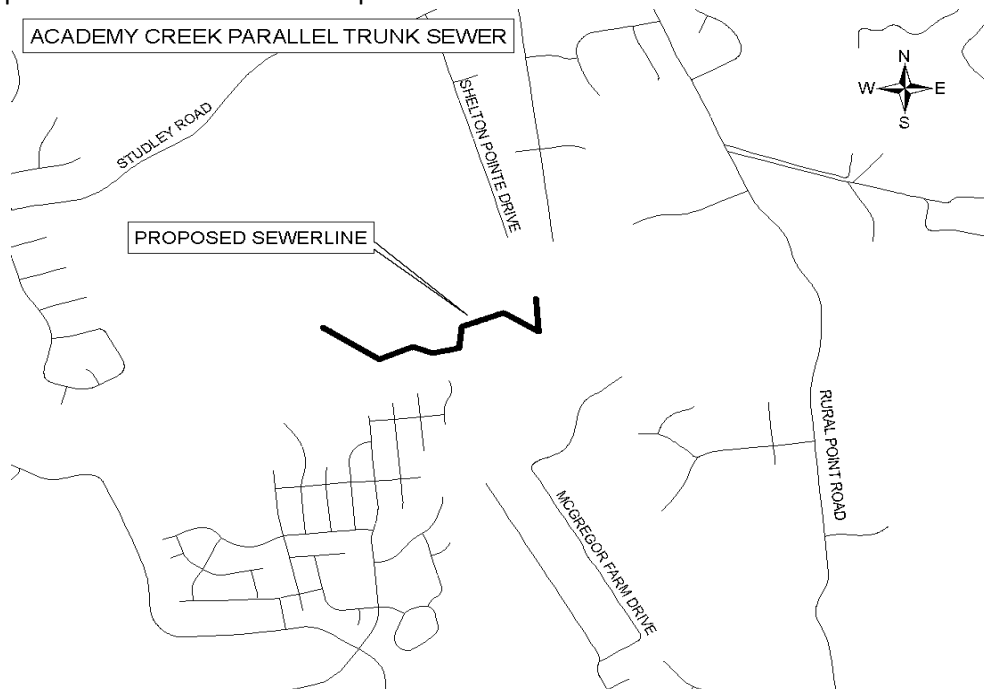
This project provides for the FY26 (Year 5) design and easement acquisition of approximately 2,600' of parallel 42" sanitary sewer just upstream of the Shelton Pointe Pump Station. This section of sewer becomes a restriction as the service area to Totopotomoy Wastewater Treatment Plant expands west and north. Construction occurs outside the scope of the five-year plan.

USEFUL LIFE
 50 years

TIMETABLE
 Design and easement acquisition in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	300,000	300,000
Transfer from Public Utilities	-	-	-	-	300,000	300,000
Funding Uses	-	-	-	-	300,000	300,000
Land Purch & Development Addtl	-	-	-	-	120,000	120,000
Professional Services	-	-	-	-	180,000	180,000

Ashland Sewerline Rehabilitation

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Town of Ashland and adjacent areas

PROJECT DESCRIPTION

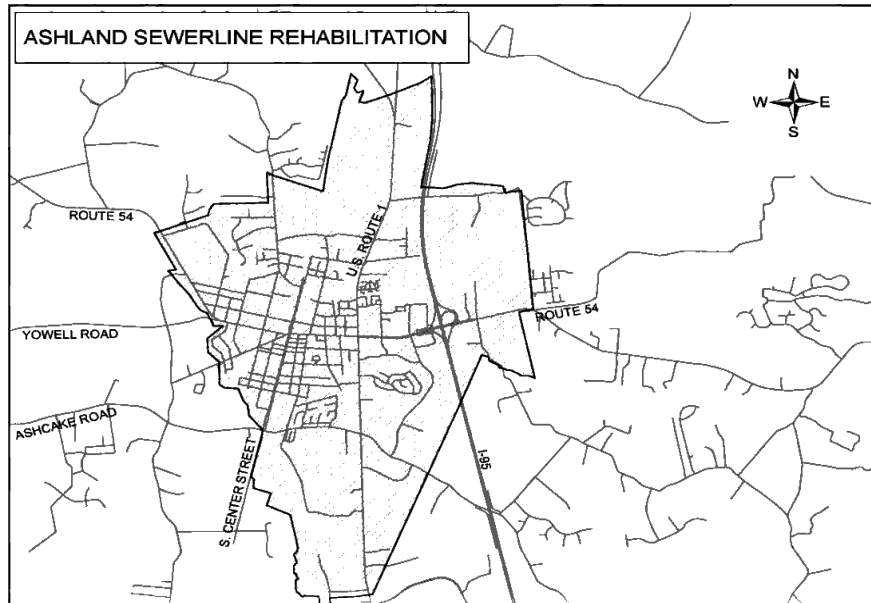
This project provides for sewerline rehabilitation within the Ashland area. This project consists of sewerline, lateral and manhole rehabilitation and replacement. These repairs are needed to correct structural defects in the sewer pipes and to reduce the volume of inflow and infiltration to the sanitary sewer system.

USEFUL LIFE
50 years

TIMETABLE
Design in FY23 (Year 2); Construction in FY24 (Year 3).

OPERATING IMPACT

Decreased operating costs beginning in FY25 (Year 4).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	200,000	800,000	-	-	1,000,000
Transfer from Public Utilities	-	200,000	800,000	-	-	1,000,000
Funding Uses	-	200,000	800,000	-	-	1,000,000
Professional Services	-	200,000	-	-	-	200,000
Utilities Infrastruct Improve	-	-	800,000	-	-	800,000
Operating Impact	-	-	-	(5,000)	(5,000)	(10,000)
Repair & Maintenance Services	-	-	-	(5,000)	(5,000)	(10,000)

AWWTP Belt Press Sludge Conveyor Repl

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of the existing sludge conveyor. The existing sludge conveyor was installed in 1992 and will have reached the end of its useful life.

USEFUL LIFE

30 years

TIMETABLE

Design and construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	371,000	371,000
Transfer from Public Utilities	-	-	-	-	371,000	371,000
Funding Uses	-	-	-	-	371,000	371,000
Professional Services	-	-	-	-	34,000	34,000
Utilities Infrastruct Improve	-	-	-	-	337,000	337,000

AWWTP Blower & Basin Pump Repl

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of three centrifugal blowers and two equalization basin pumps which will have reached the end of their useful life.

USEFUL LIFE

20 years

TIMETABLE

Design and construction in FY24 (Year 3).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	1,026,000	-	-	1,026,000
Transfer from Public Utilities	-	-	1,026,000	-	-	1,026,000
Funding Uses	-	-	1,026,000	-	-	1,026,000
Professional Services	-	-	95,000	-	-	95,000
Utilities Infrastruct Improve	-	-	931,000	-	-	931,000

AWWTP Motor Control Center Equip Rehab

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of existing switch gear and motor control equipment located in the main blower building which will have reached the end of its useful life.

USEFUL LIFE

30 years

TIMETABLE

Design and construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	108,000	-	-	-	-	108,000
Transfer from Public Utilities	108,000	-	-	-	-	108,000
Funding Uses	108,000	-	-	-	-	108,000
Professional Services	15,000	-	-	-	-	15,000
Utilities Infrastruct Improve	93,000	-	-	-	-	93,000

AWWTP Orbal Drives Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of existing orbal drives and motors as they have reached the end of their useful life.

USEFUL LIFE

20 years

TIMETABLE

Design and construction in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	521,000	-	521,000
Transfer from Public Utilities	-	-	-	521,000	-	521,000
Funding Uses	-	-	-	521,000	-	521,000
Professional Services	-	-	-	48,000	-	48,000
Utilities Infrastruct Improve	-	-	-	473,000	-	473,000

AWWTP Recycle PS Rehab

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of two pumps, rail system and other equipment which has reached the end of its useful life.

USEFUL LIFE

20 years

TIMETABLE

Design and construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	98,000	-	-	-	-	98,000
Transfer from Public Utilities	98,000	-	-	-	-	98,000
Funding Uses	98,000	-	-	-	-	98,000
Professional Services	17,000	-	-	-	-	17,000
Utilities Infrastruct Improve	81,000	-	-	-	-	81,000

Burnside Farms/Summer Walk Sewer Repl

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Burnside Farms and Summer Walk Subdivisions

PROJECT DESCRIPTION

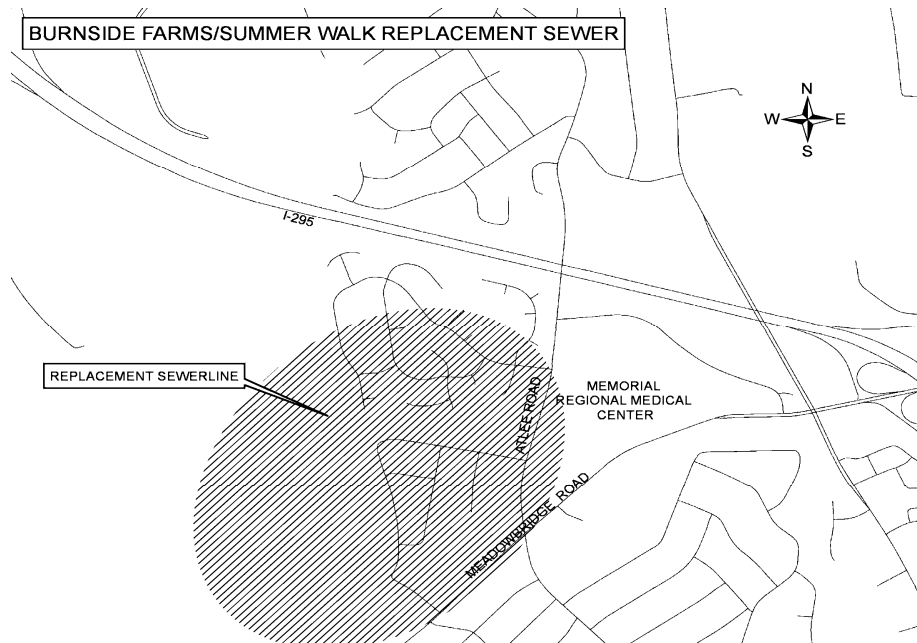
This project provides for construction to replace 6,000' of existing 8" and 10" sanitary sewer with a new 12" sanitary sewer through the Burnside Farms and Summer Walk subdivisions to provide capacity for growth in the vicinity of Memorial Regional Medical Center. Prior year funding provided for design and easement acquisition.

USEFUL LIFE
50 years

TIMETABLE
Construction in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	1,491,000	-	-	-	1,491,000
Transfer from Public Utilities	-	1,491,000	-	-	-	1,491,000
Funding Uses	-	1,491,000	-	-	-	1,491,000
Utilities Infrastruct Construc	-	1,491,000	-	-	-	1,491,000

BWWPS Odor Control Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Beaverdam Wastewater Pump Station

PROJECT DESCRIPTION

This project includes the removal and replacement of the existing odor control system.

USEFUL LIFE

30 years

TIMETABLE

Design and construction in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	762,000	-	762,000
Transfer from Public Utilities	-	-	-	762,000	-	762,000
Funding Uses	-	-	-	762,000	-	762,000
Professional Services	-	-	-	110,000	-	110,000
Utilities Infrastruct Improve	-	-	-	652,000	-	652,000

BWWPS Painting

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Beaverdam Wastewater Pump Station

PROJECT DESCRIPTION

This project provides for the painting of piping and associated metal surfaces in the pump station.

USEFUL LIFE

30 years

TIMETABLE

Design and construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	94,000	94,000
Transfer from Public Utilities	-	-	-	-	94,000	94,000
Funding Uses	-	-	-	-	94,000	94,000
Professional Services	-	-	-	-	22,000	22,000
Utilities Infrastruct Improve	-	-	-	-	72,000	72,000

Doswell Offload WWPS #2 & Force Main

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Wastewater pump station near Old Ridge Road in the vicinity of the South Anna River

PROJECT DESCRIPTION

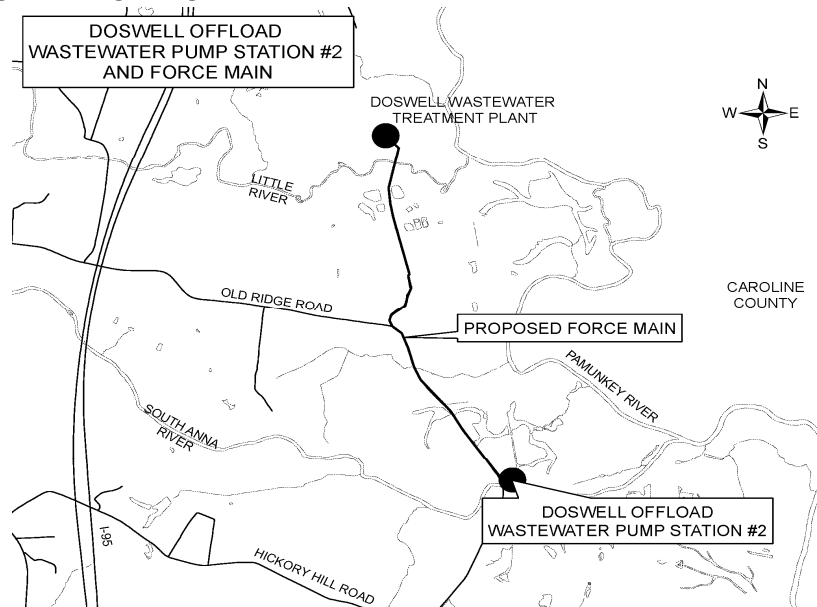
This project is for the construction a new wastewater pump station with an ultimate capacity of 8-12 million gallons per day (MGD) and approximately 13,000' of 12" force main. The pump station will initially pump to the Doswell Wastewater Treatment Plant. In the future, the station will be modified and it will send wastewater to the Totopotomoy Wastewater Treatment Plant. This pump station will serve the planned business area through which Hickory Hill Road passes. The initial project will provide average sewer capacity of approximately 0.25 MGD.

USEFUL LIFE
5 to 50 years

TIMETABLE
Construction in FY25 (Year 4).

OPERATING IMPACT

Recurring operating costs beginning in FY26 (Year 5).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	10,462,000	-	10,462,000
Transfer from Public Utilities	-	-	-	10,462,000	-	10,462,000
Funding Uses	-	-	-	10,462,000	-	10,462,000
Utilities Infrastruct Construc	-	-	-	10,462,000	-	10,462,000
Operating Impact	-	-	-	-	50,000	50,000
Repair & Maintenance Services	-	-	-	-	50,000	50,000

Doswell WWTP Upgrade

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION

This project upgrades the capacity of the wastewater treatment plant from approximately 1 million gallons per day (MGD) to approximately 2 MGD. The planned amount in the current CIP is for design. Construction occurs outside the scope of the five-year plan.

USEFUL LIFE

20 to 50 years

TIMETABLE

Design in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are unknown at this time.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	1,300,000	1,300,000
Transfer from Public Utilities	-	-	-	-	1,300,000	1,300,000
Funding Uses	-	-	-	-	1,300,000	1,300,000
Professional Services	-	-	-	-	1,300,000	1,300,000

DWWTP Belt Press Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION

This project is for the replacement of the belt press as it will have reached the end of its useful life.

USEFUL LIFE

20 years

TIMETABLE

Design and construction in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	569,000	-	-	-	569,000
Transfer from Public Utilities	-	569,000	-	-	-	569,000
Funding Uses	-	569,000	-	-	-	569,000
Professional Services	-	82,000	-	-	-	82,000
Utilities Infrastruct Improve	-	487,000	-	-	-	487,000

DWWTP Influent VFDs Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of the existing variable frequency drives (VFDs). The existing VFDs have reached the end of their useful life.

USEFUL LIFE

10 years

TIMETABLE

Design and construction in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	177,000	-	177,000
Transfer from Public Utilities	-	-	-	177,000	-	177,000
Funding Uses	-	-	-	177,000	-	177,000
Professional Services	-	-	-	23,000	-	23,000
Utilities Infrastruct Improve	-	-	-	154,000	-	154,000

DWWTP RAS Pump Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION

This project includes the replacement of the return activated sludge (RAS) pumps as they will have reached the end of their useful life.

USEFUL LIFE

20 years

TIMETABLE

Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	72,000	-	-	-	-	72,000
Transfer from Public Utilities	72,000	-	-	-	-	72,000
Funding Uses	72,000	-	-	-	-	72,000
Utilities Infrastruct Improve	72,000	-	-	-	-	72,000

DWWTP Sludge Drying Beds #1-3 Rehab

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the rehabilitation of three of the existing drying beds which will have reached the end of their useful life.

USEFUL LIFE

40 years

TIMETABLE

Design and construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	236,000	236,000
Transfer from Public Utilities	-	-	-	-	236,000	236,000
Funding Uses	-	-	-	-	236,000	236,000
Professional Services	-	-	-	-	40,000	40,000
Utilities Infrastruct Improve	-	-	-	-	196,000	196,000

Hanover Indust Airpark Sewerline Rehab

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Hanover Industrial Airpark

PROJECT DESCRIPTION

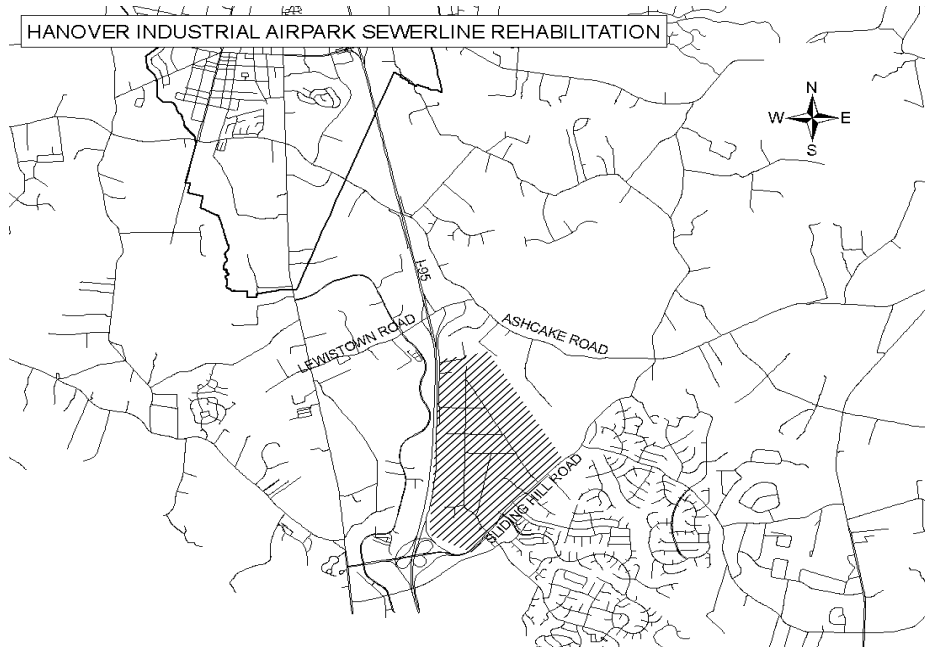
This project consists of sewerline, lateral and manhole rehabilitation and replacement to correct deficiencies and reduce inflow/infiltration. The planned amount in the current CIP is for design. Construction occurs outside the scope of the five-year plan.

USEFUL LIFE
50 years

TIMETABLE
Design in FY26 (Year 5).

OPERATING IMPACT

Decreased costs beginning in FY28 occur outside the scope of the five-year plan.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	200,000	200,000
Transfer from Public Utilities	-	-	-	-	200,000	200,000
Funding Uses	-	-	-	-	200,000	200,000
Professional Services	-	-	-	-	200,000	200,000

Hanover WWPS Generator Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Hanover Wastewater Pump Station

PROJECT DESCRIPTION

This project provides for the replacement of the existing generator. The existing generator was installed in 1995 and will have reached the end of its useful life.

USEFUL LIFE

30 years

TIMETABLE

Design and construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	101,000	101,000
Transfer from Public Utilities	-	-	-	-	101,000	101,000
Funding Uses	-	-	-	-	101,000	101,000
Professional Services	-	-	-	-	10,000	10,000
Utilities Infrastruct Improve	-	-	-	-	91,000	91,000

Large Pumps Replacement WWPS

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Various existing wastewater pump stations

PROJECT DESCRIPTION

This project provides for the replacement of large pumps as they reach the end of their service life.

USEFUL LIFE

20 years

TIMETABLE

Construction completed annually.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	133,000	57,000	140,000	144,000	62,000	536,000
Transfer from Public Utilities	133,000	57,000	140,000	144,000	62,000	536,000
Funding Uses	133,000	57,000	140,000	144,000	62,000	536,000
Utilities Infrastruct Improve	133,000	57,000	140,000	144,000	62,000	536,000

Lee-Davis WWPS Grinder Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Lee Davis Road Wastewater Pump Station

PROJECT DESCRIPTION

This project includes the replacement of the grinder. The existing grinder will have reached the end of its useful life.

USEFUL LIFE

20 years

TIMETABLE

Design and construction in FY22 (Year1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	226,000	-	-	-	-	226,000
Transfer from Public Utilities	226,000	-	-	-	-	226,000
Funding Uses	226,000	-	-	-	-	226,000
Professional Services	34,000	-	-	-	-	34,000
Utilities Infrastruct Improve	192,000	-	-	-	-	192,000

Mechanicsville Sewer Rehabilitation

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Mechanicsville

PROJECT DESCRIPTION

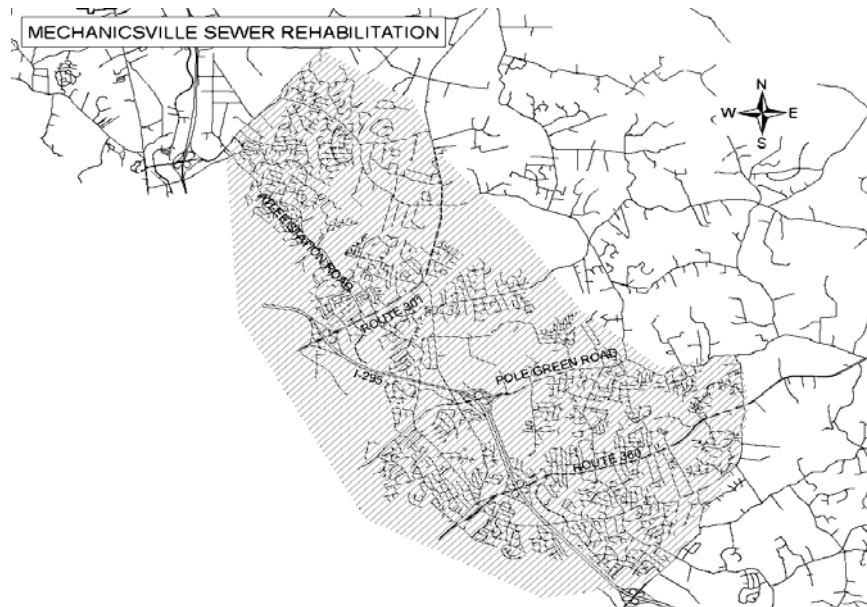
This project provides for sewerline rehabilitation within the Mechanicsville area. It consists of sewerline, lateral and manhole rehabilitation and replacement. These repairs are needed to correct structural defects in the sewer pipes and to reduce the volume of inflow and infiltration to the sanitary sewer system.

USEFUL LIFE
50 years

TIMETABLE
Design in FY24 (Year 3); Construction in FY25 (Year 4).

OPERATING IMPACT

Decreased operating costs beginning in FY26 (Year 5).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	200,000	800,000	-	1,000,000
Transfer from Public Utilities	-	-	200,000	800,000	-	1,000,000
Funding Uses	-	-	200,000	800,000	-	1,000,000
Professional Services	-	-	200,000	-	-	200,000
Utilities Infrastruct Improve	-	-	-	800,000	-	800,000
Operating Impact	-	-	-	-	(5,000)	(5,000)
Repair & Maintenance Services	-	-	-	-	(5,000)	(5,000)

Middle Chickahominy WWPS Upgrade

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Middle Chickahominy Wastewater Pump Station

PROJECT DESCRIPTION

This project provides for the design and construction of improvements to the pump station to increase capacity to approximately 5.9 million gallons per day (MGD).

USEFUL LIFE

5 to 20 years

TIMETABLE

Construction in FY22 (Year 1).

OPERATING IMPACT

Recurring operating costs beginning in FY23 (Year 2).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	1,200,000	-	-	-	-	1,200,000
Transfer from Public Utilities	1,200,000	-	-	-	-	1,200,000
Funding Uses	1,200,000	-	-	-	-	1,200,000
Utilities Infrastruct Construc	1,200,000	-	-	-	-	1,200,000
Operating Impact	-	5,000	5,000	5,000	5,000	20,000
Repair & Maintenance Services	-	5,000	5,000	5,000	5,000	20,000

Purchase Septage Hauling Site

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Land Acquisition

FUNCTIONAL AREA

Public Utilities

LOCATION

Mechanicsville area along existing trunk sewers, specific location unknown

PROJECT DESCRIPTION

This project provides for the purchase of property for a truck hauled waste facility which is currently located on a rented site.

USEFUL LIFE

N/A

TIMETABLE

Purchase land in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	500,000	500,000
Transfer from Public Utilities	-	-	-	-	500,000	500,000
Funding Uses	-	-	-	-	500,000	500,000
Land Purch & Development Addtl	-	-	-	-	500,000	500,000

Shelton Pointe Force Main Upgrade

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Shelton Pointe Force Main

PROJECT DESCRIPTION

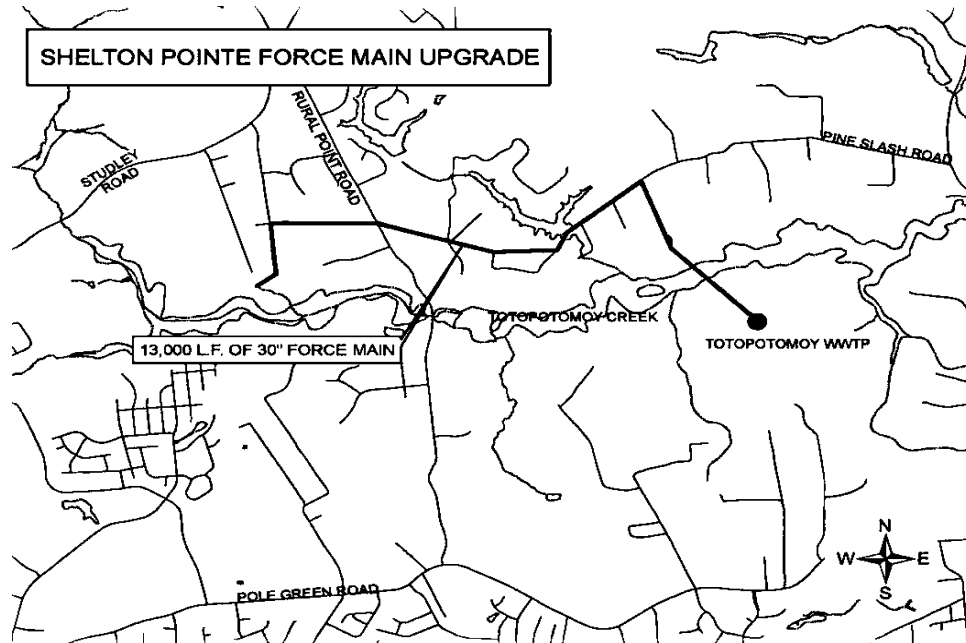
This project provides for the design, easement acquisition and construction of 13,000' of 30" force main beginning at the Shelton Pointe Wastewater Pump Station and extending northeast to the Totopotomoy Wastewater Treatment Plant. This project will allow additional wastewater from Shelton Pointe Wastewater Pump Station to be conveyed to the Totopotomoy Wastewater Treatment Plant.

USEFUL LIFE
50 years

TIMETABLE
Construction in FY23 (Year 2).

OPERATING IMPACT

Recurring operating costs beginning in FY25 (Year 4).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	7,072,000	-	-	-	7,072,000
Transfer from Public Utilities	-	7,072,000	-	-	-	7,072,000
Funding Uses	-	7,072,000	-	-	-	7,072,000
Utilities Infrastruct Construc	-	7,072,000	-	-	-	7,072,000
Operating Impact	-	-	-	8,000	8,000	16,000
Repair & Maintenance Services	-	-	-	8,000	8,000	16,000

Shelton Pointe WWPS Upgrade

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Shelton Pointe Wastewater Pump Station

PROJECT DESCRIPTION

This project upgrades the capacity of the pump station from approximately 5 million gallons per day (MGD) to approximately 12 MGD and the replacement in kind of the existing wastewater grinder. The existing grinder will have reached the end of its useful life.

USEFUL LIFE

5 to 20 years

TIMETABLE

Design in FY22 (Year 1); Construction in FY24 (Year 3).

OPERATING IMPACT

Recurring operating costs beginning in FY25 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	224,000	-	915,000	-	-	1,139,000
Transfer from Public Utilities	224,000	-	915,000	-	-	1,139,000
Funding Uses	224,000	-	915,000	-	-	1,139,000
Professional Services	224,000	-	-	-	-	224,000
Utilities Infrastruct Construc	-	-	915,000	-	-	915,000
Operating Impact	-	-	-	5,000	5,000	10,000
Repair & Maintenance Services	-	-	-	5,000	5,000	10,000

Snead Street WWPS Generator Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Snead Street Wastewater Pump Station

PROJECT DESCRIPTION

This project provides for the replacement of the backup generator. The existing backup generator was installed in 1992 and will have reached the end of its useful life.

USEFUL LIFE

30 years

TIMETABLE

Design and construction in FY24 (Year 3).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	78,000	-	-	78,000
Transfer from Public Utilities	-	-	78,000	-	-	78,000
Funding Uses	-	-	78,000	-	-	78,000
Professional Services	-	-	10,000	-	-	10,000
Utilities Infrastruct Improve	-	-	68,000	-	-	68,000

Stony Run Phases 7 & 8

DEPARTMENT
PU CIP Sewer

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Town of Ashland Limits to the South Center Street Wastewater Pump Station

PROJECT DESCRIPTION

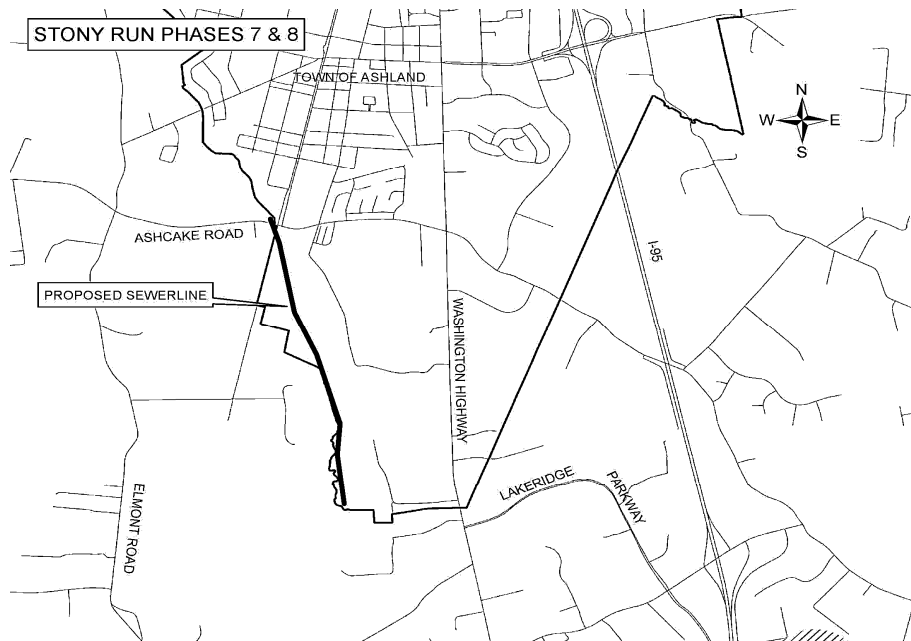
This project provides for the design, easement acquisition and construction of 7,550' of 24" and 12" sanitary sewer from the Town of Ashland limits to the South Center Street Pump Station.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY26 (Year 5).

OPERATING IMPACT

Recurring costs of \$3,000 beginning in FY30 occur outside the scope of the five-year plan.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	811,000	811,000
Transfer from Public Utilities	-	-	-	-	811,000	811,000
Funding Uses	-	-	-	-	811,000	811,000
Land Purch & Development Addtl	-	-	-	-	324,000	324,000
Professional Services	-	-	-	-	487,000	487,000

TWWTP Alum Tank Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of the existing alum tank which will have reached the end of its useful life.

USEFUL LIFE

10 years

TIMETABLE

Design and construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	124,000	124,000
Transfer from Public Utilities	-	-	-	-	124,000	124,000
Funding Uses	-	-	-	-	124,000	124,000
Professional Services	-	-	-	-	16,000	16,000
Utilities Infrastruct Improve	-	-	-	-	108,000	108,000

TWWTP Improvements

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of nitrified recycle (NRCY) pumps, digester blowers and sodium hydroxide chemical feed system.

USEFUL LIFE

20 years

TIMETABLE

Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	815,000	-	-	-	-	815,000
Transfer from Public Utilities	815,000	-	-	-	-	815,000
Funding Uses	815,000	-	-	-	-	815,000
Utilities Infrastruct Improve	815,000	-	-	-	-	815,000

TWWTP PLC 3 Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Equipment

FUNCTIONAL AREA

Public Utilities

LOCATION

Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of programmable logic controller (PLC) 3 and associated integration.

USEFUL LIFE

10 years

TIMETABLE

Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	88,000	-	-	-	-	88,000
Transfer from Public Utilities	88,000	-	-	-	-	88,000
Funding Uses	88,000	-	-	-	-	88,000
Utilities Infrastruct Improve	88,000	-	-	-	-	88,000

TWWTP Scrubber Overhaul

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION

This project includes an overhaul of the plant scrubber and associated equipment, along with blower/motor replacement.

USEFUL LIFE

20 years

TIMETABLE

Design and construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	306,000	306,000
Transfer from Public Utilities	-	-	-	-	306,000	306,000
Funding Uses	-	-	-	-	306,000	306,000
Professional Services	-	-	-	-	19,000	19,000
Utilities Infrastruct Improve	-	-	-	-	287,000	287,000

TWWTP Sodium Hydroxide Tank Replacement

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of the existing sodium hydroxide tank which will have reached the end of its useful life.

USEFUL LIFE

10 years

TIMETABLE

Design and construction in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	112,000	-	-	-	112,000
Transfer from Public Utilities	-	112,000	-	-	-	112,000
Funding Uses	-	112,000	-	-	-	112,000
Professional Services	-	14,000	-	-	-	14,000
Utilities Infrastruct Improve	-	98,000	-	-	-	98,000

WIP III Upgrades AWWTP

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Ashland Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for improvements to comply with nutrient reductions as detailed in Virginia’s approved Phase III Chesapeake Bay Watershed Implementation Plan (WIP).

USEFUL LIFE

20 to 50 years

TIMETABLE

Design in FY24 (Year 3); Construction in FY26 (Year 5).

OPERATING IMPACT

Recurring costs of \$400,000 beginning in FY28 occur outside the scope of the five-year plan.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	2,511,000	-	10,043,000	12,554,000
Transfer from Public Utilities	-	-	2,511,000	-	10,043,000	12,554,000
Funding Uses	-	-	2,511,000	-	10,043,000	12,554,000
Professional Services	-	-	2,511,000	-	-	2,511,000
Utilities Infrastruct Improve	-	-	-	-	10,043,000	10,043,000

WIP III Upgrades DWWTP

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for improvements to comply with nutrient reductions as detailed in Virginia’s approved Phase III Chesapeake Bay Watershed Implementation Plan (WIP).

USEFUL LIFE

20 to 50 years

TIMETABLE

Design in FY22 (Year 1); Construction in FY23 (Year 2).

OPERATING IMPACT

Recurring operating costs beginning in FY25 (Year 4).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	622,000	6,100,000	-	-	-	6,722,000
Transfer from Public Utilities	622,000	6,100,000	-	-	-	6,722,000
Funding Uses	622,000	6,100,000	-	-	-	6,722,000
Professional Services	622,000	-	-	-	-	622,000
Utilities Infrastruct Improve	-	6,100,000	-	-	-	6,100,000
Operating Impact	-	-	-	250,000	250,000	500,000
Repair & Maintenance Services	-	-	-	250,000	250,000	500,000

WIP III Upgrades TWWTP

DEPARTMENT

PU CIP Sewer

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Totopotomoy Wastewater Treatment Plant

PROJECT DESCRIPTION

This project provides for improvements to comply with nutrient reductions as detailed in Virginia’s approved Phase III Chesapeake Bay Watershed Implementation Plan (WIP).

USEFUL LIFE

20 to 50 years

TIMETABLE

Design in FY22 (Year 1) & FY23 (Year 2);
Construction in FY24 (Year 3).

OPERATING IMPACT

Recurring operating costs beginning in FY26 (Year 5).

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	800,000	649,000	7,625,000	-	-	9,074,000
Transfer from Public Utilities	800,000	649,000	7,625,000	-	-	9,074,000
Funding Uses	800,000	649,000	7,625,000	-	-	9,074,000
Professional Services	800,000	649,000	-	-	-	1,449,000
Utilities Infrastruct Improve	-	-	7,625,000	-	-	7,625,000
Operating Impact	-	-	-	-	500,000	500,000
Repair & Maintenance Services	-	-	-	-	500,000	500,000

Air Park Water Tank Rehabilitation

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Air Park Water Storage Tank and Pump Station

PROJECT DESCRIPTION

This project provides for the rehabilitation of the Air Park Water Storage Tank.

USEFUL LIFE

20 years

TIMETABLE

Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	795,000	-	-	-	-	795,000
Transfer from Public Utilities	795,000	-	-	-	-	795,000
Funding Uses	795,000	-	-	-	-	795,000
Utilities Infrastruct Improve	795,000	-	-	-	-	795,000

Ashcake Rd W/L - Elmont Rd to Oakhill Estates

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Along Ashcake Road from Elmont Road to Wildwood Blvd

PROJECT DESCRIPTION

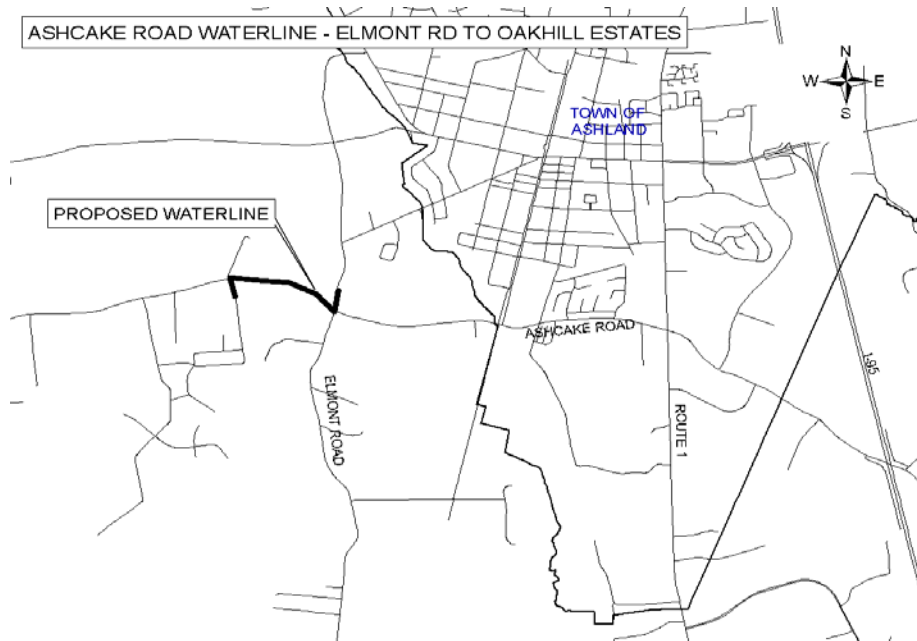
This project provides for the FY26 (Year 5) design and easement acquisition of approximately 3,500' of 16" waterline from Elmont Road to Wildwood Boulevard along Ashcake Road to interconnect the Oak Hill Estates water system with the larger suburban water distribution system. Construction occurs outside the scope of the five-year plan.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY26 (Year 5).

OPERATING IMPACT

Decreased costs of \$48,000 beginning in FY30 occur outside the scope of the five-year plan.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	317,000	317,000
Transfer from Public Utilities	-	-	-	-	317,000	317,000
Funding Uses	-	-	-	-	317,000	317,000
Land Purch & Development Addtl	-	-	-	-	113,000	113,000
Professional Services	-	-	-	-	204,000	204,000

Creighton Road WST Recoating & Rehab

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Creighton Road Water Storage Tank

PROJECT DESCRIPTION

This project provides for the rehabilitation of the Creighton Road Water Storage Tank.

USEFUL LIFE

20 years

TIMETABLE

Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	500,000	-	-	-	-	500,000
Transfer from Public Utilities	500,000	-	-	-	-	500,000
Funding Uses	500,000	-	-	-	-	500,000
Utilities Infrastruct Improve	500,000	-	-	-	-	500,000

Doswell Million Gallon Tank Rehab

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Million Gallon Tank

PROJECT DESCRIPTION

This project provides for the rehabilitation of the Doswell Million Gallon Tank.

USEFUL LIFE

20 years

TIMETABLE

Design and construction in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	670,000	-	-	-	670,000
Transfer from Public Utilities	-	670,000	-	-	-	670,000
Funding Uses	-	670,000	-	-	-	670,000
Professional Services	-	155,000	-	-	-	155,000
Utilities Infrastruct Improve	-	515,000	-	-	-	515,000

Dow Gil Rd to Harley Club Dr Waterline

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Along Ashcake Road from Dow Gil Road to Harley Club Drive

PROJECT DESCRIPTION

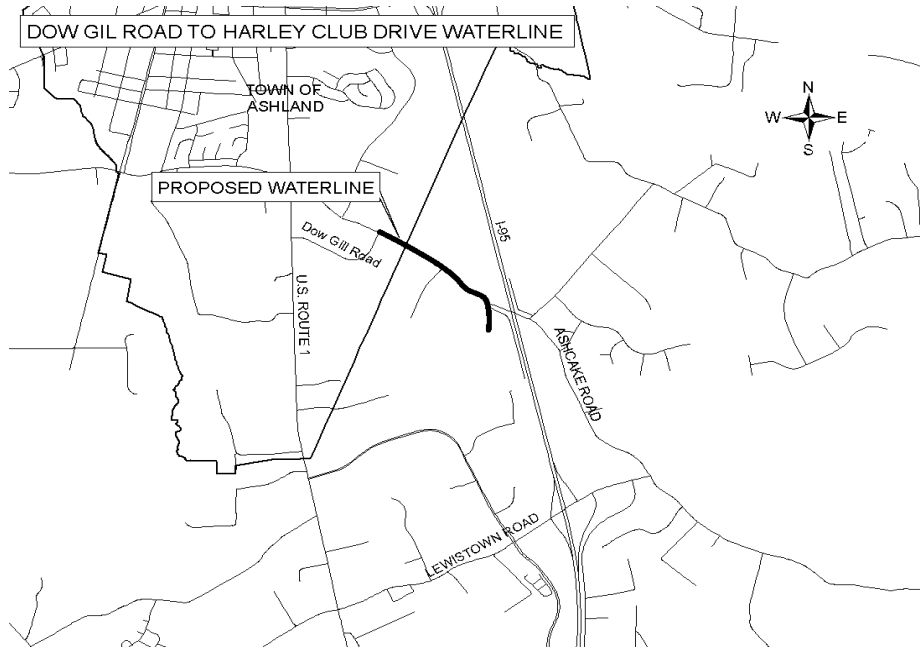
This project provides for the FY24 (Year 3) design and easement acquisition and the FY26 (Year 5) construction of approximately 4,000' of 20" waterline from Harley Club Drive in the Northlake Development to Ashcake Road and along Ashcake Rd to Dow Gil Road.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY24 (Year 3);
Construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	457,000	-	1,557,000	2,014,000
Transfer from Public Utilities	-	-	457,000	-	1,557,000	2,014,000
Funding Uses	-	-	457,000	-	1,557,000	2,014,000
Land Purch & Development Addtl	-	-	194,000	-	-	194,000
Professional Services	-	-	263,000	-	-	263,000
Utilities Infrastruct Construc	-	-	-	-	1,557,000	1,557,000

DWTP Lagoon Rehabilitation

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Water Treatment Plant

PROJECT DESCRIPTION

This project consists of renovating the existing sludge lagoons to include liner replacements and access ramps.

USEFUL LIFE

30 years

TIMETABLE

Design in FY23 (Year 2); Construction in FY24 (Year 3).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	92,000	979,000	-	-	1,071,000
Transfer from Public Utilities	-	92,000	979,000	-	-	1,071,000
Funding Uses	-	92,000	979,000	-	-	1,071,000
Professional Services	-	92,000	-	-	-	92,000
Utilities Infrastruct Improve	-	-	979,000	-	-	979,000

DWTP Raw Water Pumphouse Rehabilitation

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Doswell Water Treatment Plant

PROJECT DESCRIPTION

This project provides for the replacement of the main electrical service power cables, replacement of the variable frequency drive (VFD)/breaker panel, electrical room improvements and replacement of existing 3” waterline.

USEFUL LIFE

10 to 30 years

TIMETABLE

Design in FY24 (Year 3); Construction in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	118,000	680,000	-	798,000
Transfer from Public Utilities	-	-	118,000	680,000	-	798,000
Funding Uses	-	-	118,000	680,000	-	798,000
Professional Services	-	-	118,000	-	-	118,000
Utilities Infrastruct Improve	-	-	-	680,000	-	680,000

England Street Waterline Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
England Street from S. Railroad Avenue to Maple Street

PROJECT DESCRIPTION

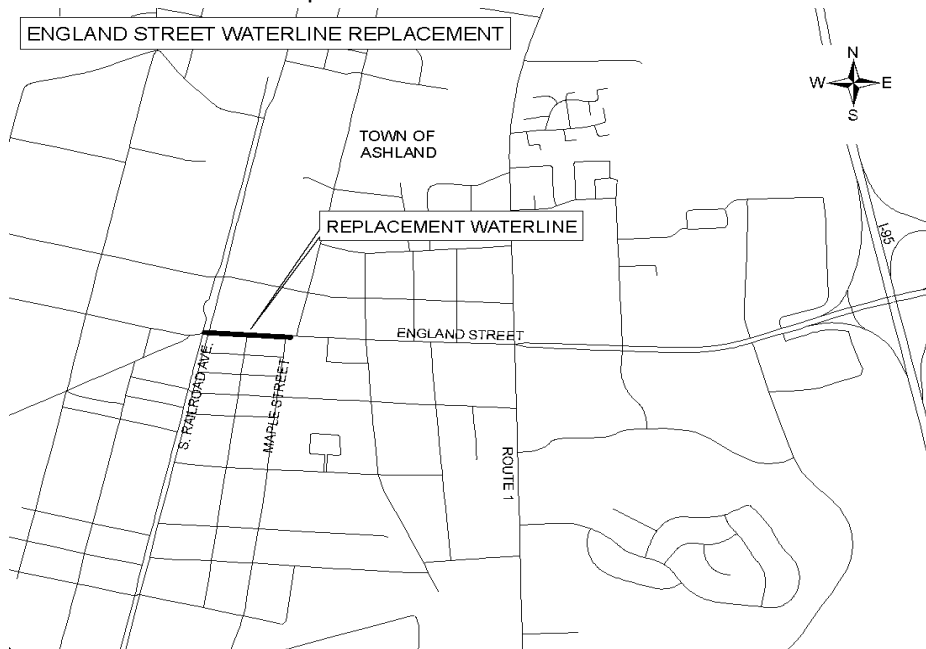
This project provides for the replacement of approximately 750' of existing waterline with 12" waterline in conjunction with the Town of Ashland's streetscape project.

USEFUL LIFE
50 years

TIMETABLE
Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	250,000	-	-	-	-	250,000
Transfer from Public Utilities	250,000	-	-	-	-	250,000
Funding Uses	250,000	-	-	-	-	250,000
Utilities Infrastruct Improve	250,000	-	-	-	-	250,000

Georgetown Electrical

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Georgetown Well House

PROJECT DESCRIPTION

This project includes the replacement of existing pump control equipment and associated electrical gear.

USEFUL LIFE

10 years

TIMETABLE

Construction in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	58,000	-	-	-	58,000
Transfer from Public Utilities	-	58,000	-	-	-	58,000
Funding Uses	-	58,000	-	-	-	58,000
Utilities Infrastruct Improve	-	58,000	-	-	-	58,000

Georgetown Well Replacement

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Georgetown Well

PROJECT DESCRIPTION

This project provides for the replacement of the existing well as it has reached the end of its useful life.

USEFUL LIFE

30 years

TIMETABLE

Construction in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	105,000	-	105,000
Transfer from Public Utilities	-	-	-	105,000	-	105,000
Funding Uses	-	-	-	105,000	-	105,000
Utilities Infrastruct Improve	-	-	-	105,000	-	105,000

Hanover-Richmond Joint Cap Contract

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Service Agreement

FUNCTIONAL AREA

Public Utilities

LOCATION

City of Richmond

PROJECT DESCRIPTION

This project provides for improvements to the City of Richmond's water system to support Hanover County's water supply.

USEFUL LIFE

N/A

TIMETABLE

Improvements completed annually.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	3,451,649	7,757,778	7,231,211	4,951,661	1,810,508	25,202,807
Transfer from Public Utilities	3,451,649	7,757,778	7,231,211	4,951,661	1,810,508	25,202,807
Funding Uses	3,451,649	7,757,778	7,231,211	4,951,661	1,810,508	25,202,807
Utilities Infrastruct Improve	3,451,649	7,757,778	7,231,211	4,951,661	1,810,508	25,202,807

Harris Court WST Rehabilitation

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Harris Court Water Storage Tank and Pump Station

PROJECT DESCRIPTION

This project provides for the rehabilitation of the Harris Court Water Storage Tank.

USEFUL LIFE

20 years

TIMETABLE

Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	393,000	-	-	-	-	393,000
Transfer from Public Utilities	393,000	-	-	-	-	393,000
Funding Uses	393,000	-	-	-	-	393,000
Utilities Infrastruct Improve	393,000	-	-	-	-	393,000

Hill Carter WST & Pump Station

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Near intersection of Elletts Crossing Road and Hickory Hill Road

PROJECT DESCRIPTION

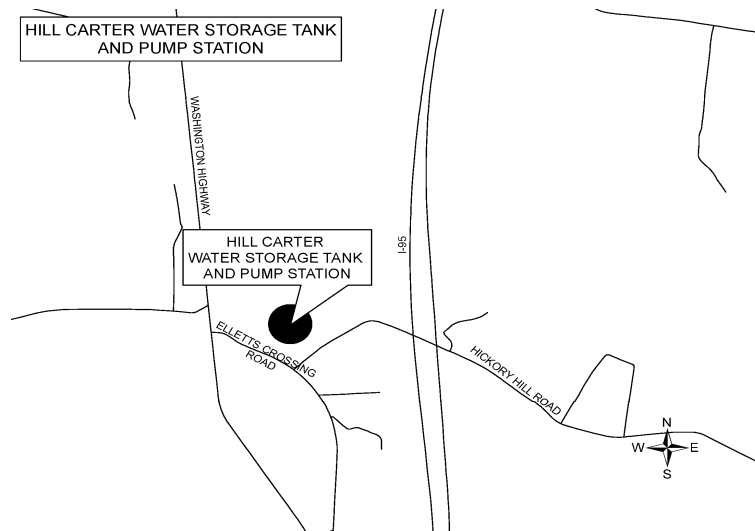
This project provides for construction of a water pump station with an initial capacity of 7 to 10 million gallons per day (MGD), associated tankage with approximately 1.5 million gallons storage and miscellaneous waterline improvements to connect this new facility to an existing 16" waterline in the area. This project will serve the planned business area east of Elletts Crossing Road that Hickory Hill Road traverses and will allow water to be moved south from the Doswell pressure zone to the Ashland pressure zone. In the near term, this project will allow water that was previously used by Bear Island Paper to be utilized by other customers.

USEFUL LIFE
5 to 50 years

TIMETABLE
Construction in FY22 (Year 1).

OPERATING IMPACT

Recurring operating costs beginning in FY23 (Year 2).



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	7,210,000	-	-	-	-	7,210,000
Transfer from Public Utilities	7,210,000	-	-	-	-	7,210,000
Funding Uses	7,210,000	-	-	-	-	7,210,000
Utilities Infrastruct Construc	7,210,000	-	-	-	-	7,210,000
Operating Impact	-	30,000	30,000	30,000	30,000	120,000
Repair & Maintenance Services	-	30,000	30,000	30,000	30,000	120,000

Kings Dominion Entrance Rd W/L

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Route 30 between Kings Dominion Entrance Road
and Railroad Crossing

PROJECT DESCRIPTION

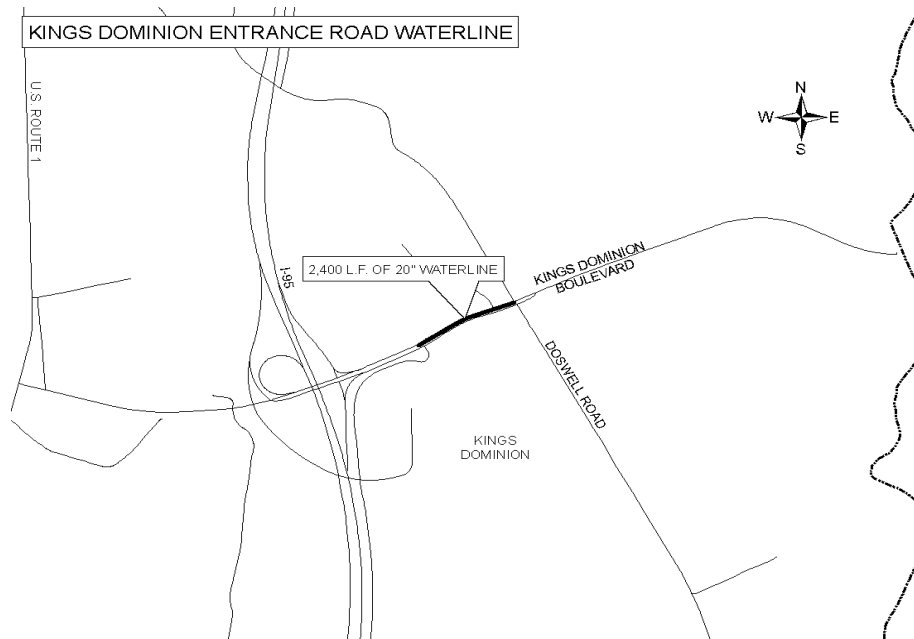
This project provides for the design, easement acquisition and construction of a 2,400' parallel 20" water main along Route 30 from the railroad crossing to the Kings Dominion entrance road.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY24 (Year 3);
Construction in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	352,000	1,409,000	-	1,761,000
Transfer from Public Utilities	-	-	352,000	1,409,000	-	1,761,000
Funding Uses	-	-	352,000	1,409,000	-	1,761,000
Land Purch & Development Addtl	-	-	106,000	-	-	106,000
Professional Services	-	-	246,000	-	-	246,000
Utilities Infrastruct Improve	-	-	-	1,409,000	-	1,409,000

Maple Street Waterline Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Maple Street from England Street to Myrtle Street

PROJECT DESCRIPTION

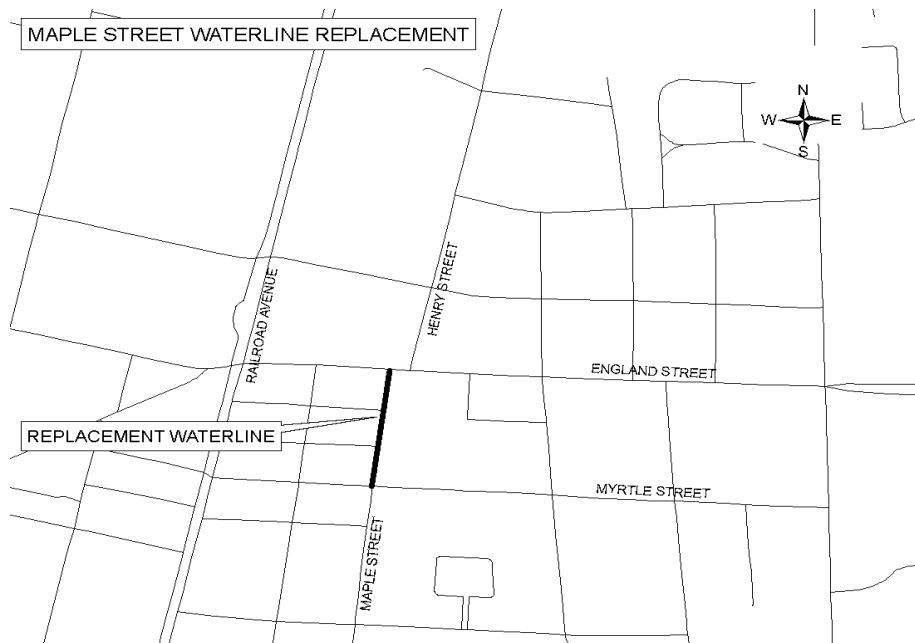
This project provides for the FY25 (Year 4) design and easement acquisition and the FY26 (Year 5) construction to replace approximately 650' of 4" waterline with 8" waterline along Maple Street from England Street to Myrtle Street.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY25 (Year 4):
Construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	100,000	213,000	313,000
Transfer from Public Utilities	-	-	-	100,000	213,000	313,000
Funding Uses	-	-	-	100,000	213,000	313,000
Land Purch & Development Addtl	-	-	-	50,000	-	50,000
Professional Services	-	-	-	50,000	-	50,000
Utilities Infrastruct Improve	-	-	-	-	213,000	213,000

Pamunkey Regional Jail Waterline

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Between the Pamunkey Regional Jail and the Hanover County Courthouse Complex

PROJECT DESCRIPTION

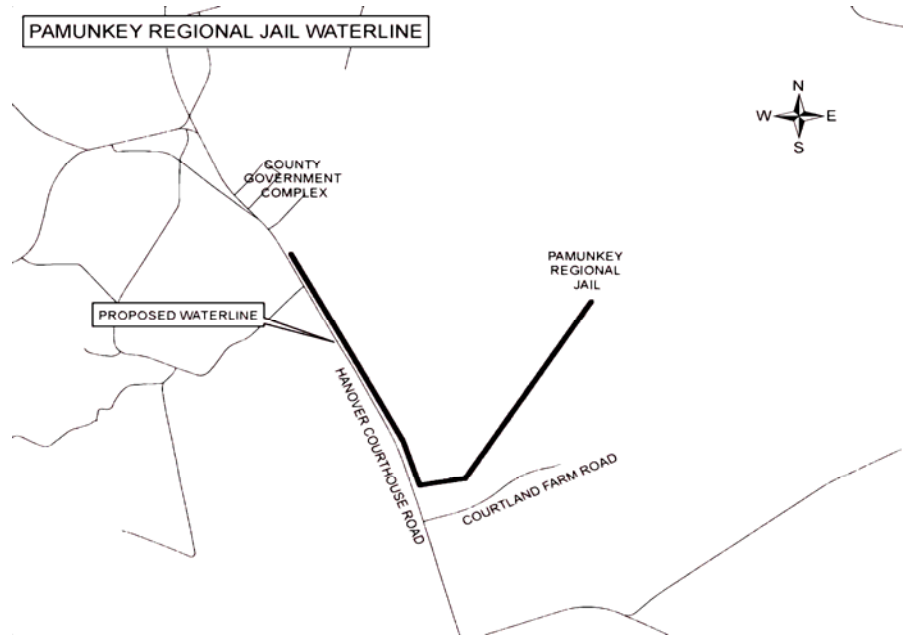
This project provides for the design, easement acquisition and construction of a second 12" waterline from the Pamunkey Regional Jail to the Hanover County Courthouse Complex. The new 7,000' waterline will provide redundancy for a critical waterline and will follow Courtland Farm Road and Route 301.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY24 (Year 3);
Construction in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	255,000	1,224,000	-	1,479,000
Transfer from Public Utilities	-	-	255,000	1,224,000	-	1,479,000
Funding Uses	-	-	255,000	1,224,000	-	1,479,000
Land Purch & Development Addtl	-	-	17,000	-	-	17,000
Professional Services	-	-	238,000	-	-	238,000
Utilities Infrastruct Improve	-	-	-	1,224,000	-	1,224,000

Pole Green Road Western W/L Improvements

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Pole Green Road from Colemanden Drive to Lee Davis Road and Rustic Lane to Rural Point Road

PROJECT DESCRIPTION

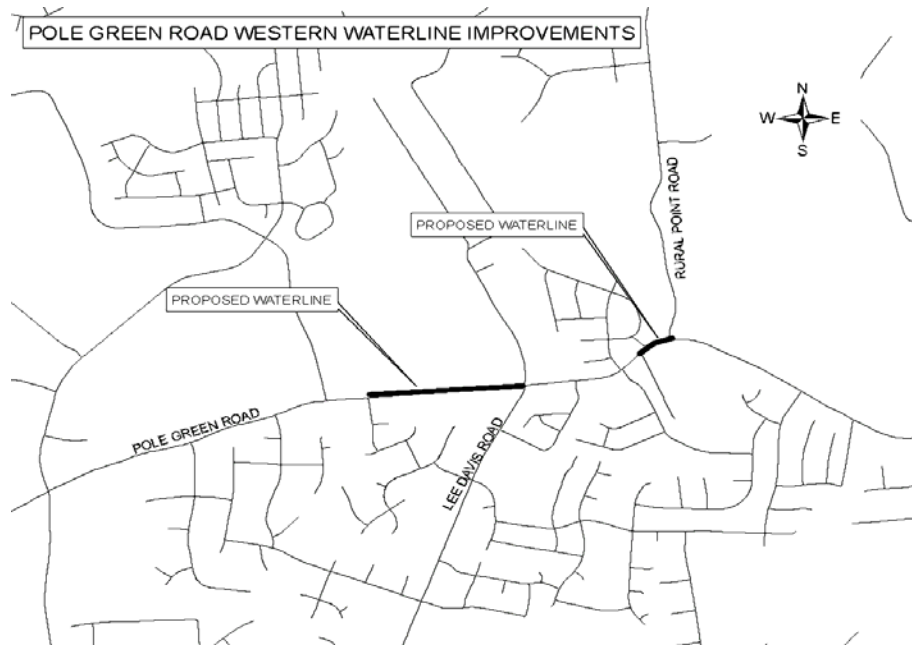
This project provides for the FY23 (Year 2) design and easement acquisition and the FY25 (Year 4) construction of 2,400' of 16" waterline along Pole Green Road from Colemanden Drive to Lee Davis Road and Rustic Lane to Rural Point Road. The waterline will be constructed as part of the road improvement project planned for Pole Green Road.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY23 (Year 2);
Construction in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	235,000	-	672,000	-	907,000
Transfer from Public Utilities	-	235,000	-	672,000	-	907,000
Funding Uses	-	235,000	-	672,000	-	907,000
Land Purch & Development Addtl	-	120,000	-	-	-	120,000
Professional Services	-	115,000	-	-	-	115,000
Utilities Infrastruct Construc	-	-	-	672,000	-	672,000

PRJ Well Head Generator Replacement

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Pamunkey Well Head Site

PROJECT DESCRIPTION

This project provides for the replacement of the existing generator. The existing generator was installed in 1995 and will have reached the end of its useful life.

USEFUL LIFE

30 years

TIMETABLE

Construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	55,000	55,000
Transfer from Public Utilities	-	-	-	-	55,000	55,000
Funding Uses	-	-	-	-	55,000	55,000
Utilities Infrastruct Improve	-	-	-	-	55,000	55,000

PRJ Well House Generator Replacement

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Pamunkey Water Booster Station

PROJECT DESCRIPTION

This project provides for the replacement of the existing generator. The existing generator was installed in 1995 and will have reached the end of its useful life.

USEFUL LIFE

30 years

TIMETABLE

Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	189,000	-	-	-	-	189,000
Transfer from Public Utilities	189,000	-	-	-	-	189,000
Funding Uses	189,000	-	-	-	-	189,000
Utilities Infrastruct Improve	189,000	-	-	-	-	189,000

Quarles Rd WST & Pleasant St WST Demo

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Quarles Road Water Storage Tank & Pleasant Street Water Storage Tank

PROJECT DESCRIPTION

This project provides for the demolition of the Quarles Road Water Storage Tank and booster pump station and the Pleasant Street Water Storage Tank and booster pump station in FY25 (Year 4). These tanks and pump stations will no longer be needed once the Hill Carter Tank and Pump Station are in service.

USEFUL LIFE

N/A

TIMETABLE

Design and demolition in FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	360,000	-	360,000
Transfer from Public Utilities	-	-	-	360,000	-	360,000
Funding Uses	-	-	-	360,000	-	360,000
Professional Services	-	-	-	87,000	-	87,000
Utilities Infrastruct Improve	-	-	-	273,000	-	273,000

Route 1 Waterline Improvements

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Route 1, Washington Highway from 12124
Washington Highway to Chandler Lane

PROJECT DESCRIPTION

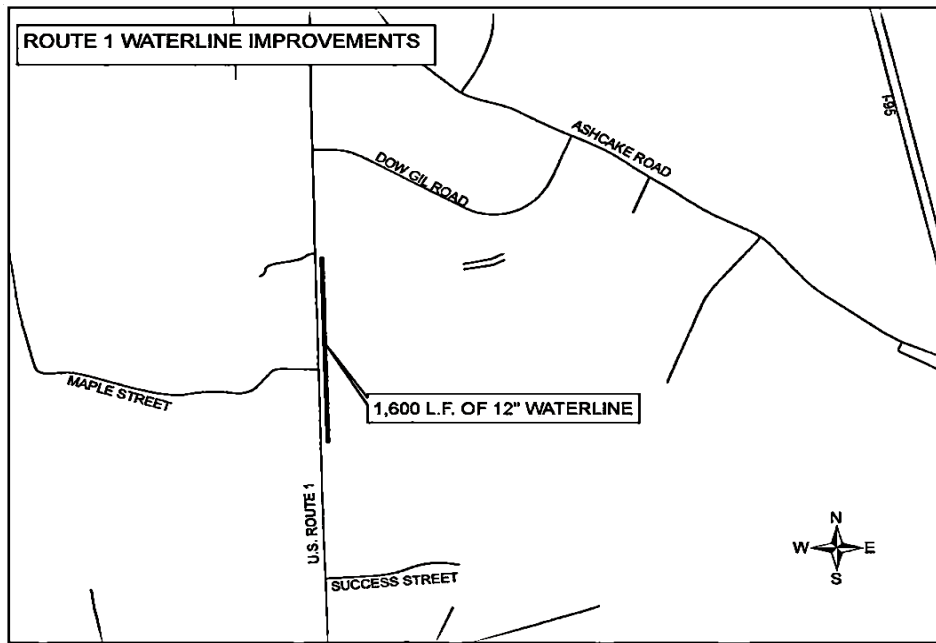
This project provides for the design, easement acquisition and construction of approximately 1,600' of 12" waterline along Route 1, Washington Highway from VA Warehousing towards Chandler Lane. This project provides public water to the east side of Route 1, redundancy moving water along the Route 1 corridor and increases the ability to meet higher demands.

USEFUL LIFE
50 years

TIMETABLE
Construction in FY22 (Year 1).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	526,000	-	-	-	-	526,000
Transfer from Public Utilities	526,000	-	-	-	-	526,000
Funding Uses	526,000	-	-	-	-	526,000
Utilities Infrastruct Construc	526,000	-	-	-	-	526,000

Route 1 from Elletts Crossing

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Route 1 from Elletts Crossing to Falling Creek
Lumber

PROJECT DESCRIPTION

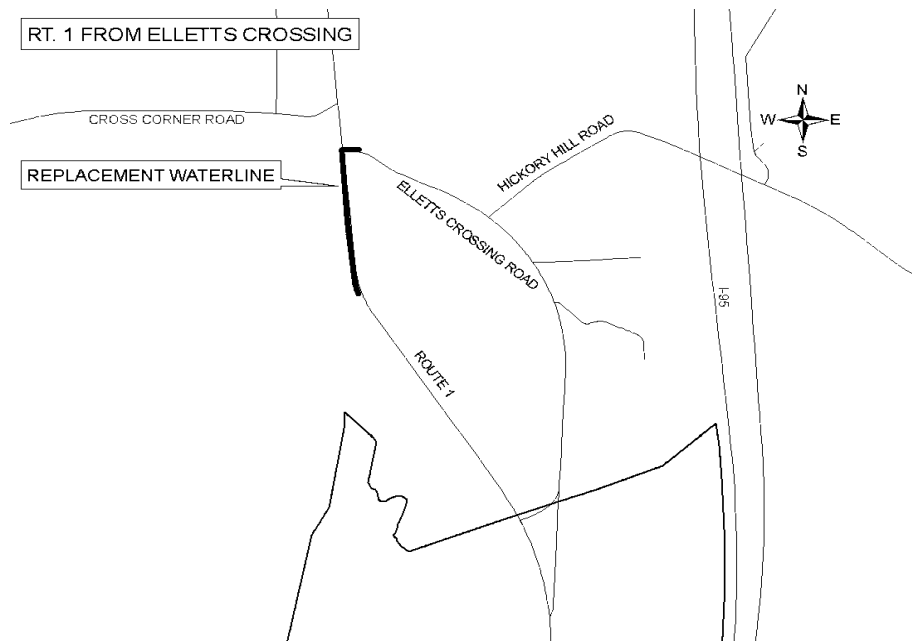
This project provides for the FY25 (Year 4) design and easement acquisition and the FY26 (Year 5) construction to replace approximately 1,700' of 6" waterline with 8" and 12" waterline along Route 1 from Elletts Crossing to Falling Creek Lumber.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY25 (Year 4);
Construction in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	68,000	516,000	584,000
Transfer from Public Utilities	-	-	-	68,000	516,000	584,000
Funding Uses	-	-	-	68,000	516,000	584,000
Land Purch & Development Addtl	-	-	-	12,000	-	12,000
Professional Services	-	-	-	56,000	-	56,000
Utilities Infrastruct Improve	-	-	-	-	516,000	516,000

Sinclair Manor Well Replacement

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Sinclair Manor Well

PROJECT DESCRIPTION

This project provides for the replacement of the existing well as it has reached the end of its useful life.

USEFUL LIFE

30 years

TIMETABLE

Construction in FY24 (Year 3).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	102,000	-	-	102,000
Transfer from Public Utilities	-	-	102,000	-	-	102,000
Funding Uses	-	-	102,000	-	-	102,000
Utilities Infrastruct Improve	-	-	102,000	-	-	102,000

Snead Street Waterline Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Snead Street from Thompson Street to Henry Clay Road

PROJECT DESCRIPTION

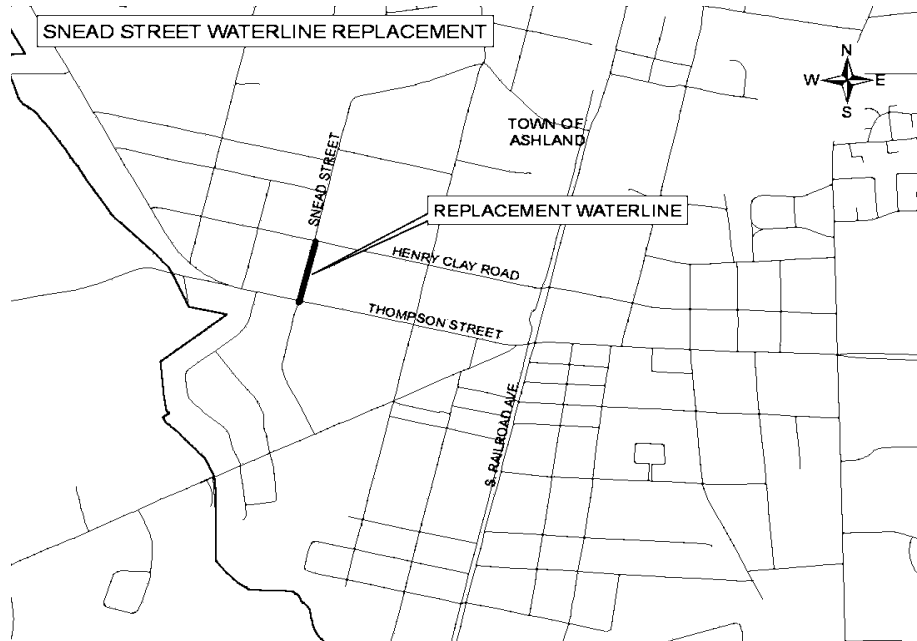
This project provides for the replacement of approximately 650' of existing 6" waterline with an 8" waterline. The existing waterline is reaching the end of its useful life. The planned amount in the current CIP is for design and easement acquisition. Construction occurs outside the scope of the five-year plan.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	81,000	81,000
Transfer from Public Utilities	-	-	-	-	81,000	81,000
Funding Uses	-	-	-	-	81,000	81,000
Land Purch & Development Addtl	-	-	-	-	31,000	31,000
Professional Services	-	-	-	-	50,000	50,000

South Railroad Avenue Waterline Replacement

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
South Railroad Avenue from Early Street to England Street

PROJECT DESCRIPTION

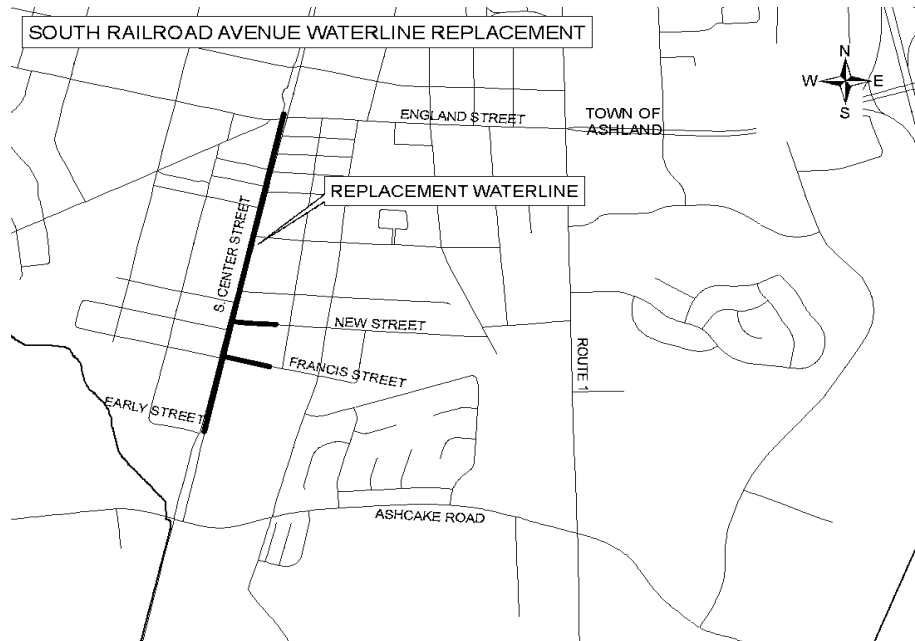
This project provides for the replacement of approximately 3,400’ of existing waterline with an 8” waterline and new interconnects at Francis Street and New Street. The existing waterline is reaching the end of its useful life. The planned amount in the current CIP is for design and easement acquisition. Construction occurs outside the scope of the five-year plan.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	342,000	342,000
Transfer from Public Utilities	-	-	-	-	342,000	342,000
Funding Uses	-	-	-	-	342,000	342,000
Land Purch & Development Addtl	-	-	-	-	122,000	122,000
Professional Services	-	-	-	-	220,000	220,000

Strawhorn Interconnect Waterline

DEPARTMENT
PU CIP Water

PROJECT TYPE
Utility Infrastructure

FUNCTIONAL AREA
Public Utilities

LOCATION
Millikin Lane to Strawbank Drive

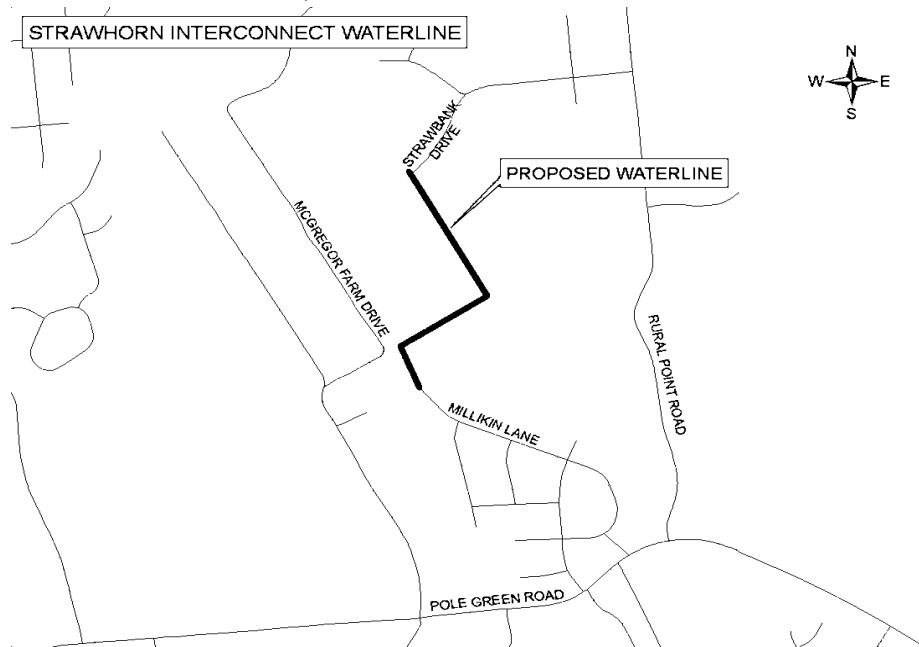
PROJECT DESCRIPTION

This project provides for the FY22 (Year 1) design and easement acquisition and the FY24 (Year 3) construction of approximately 2,100' of 8" waterline from Millikin Lane (Bishops Park Subdivision) to Strawbank Drive (Strawhorn Subdivision) to interconnect the Strawhorn water system with the larger suburban water distribution system.

USEFUL LIFE
50 years

TIMETABLE
Design and easement acquisition in FY22 (Year 1); Construction in FY24 (Year 3).

OPERATING IMPACT
Increased operational costs are not anticipated.



	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	105,000	-	336,000	-	-	441,000
Transfer from Public Utilities	105,000	-	336,000	-	-	441,000
Funding Uses	105,000	-	336,000	-	-	441,000
Land Purch & Development Addtl	48,000	-	-	-	-	48,000
Professional Services	57,000	-	-	-	-	57,000
Utilities Infrastruct Improve	-	-	336,000	-	-	336,000

Verdon Quarry Reservoir

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Pamunkey River to Verdon Quarry (Area spanning about 9 miles across Doswell)

PROJECT DESCRIPTION

This project provides for a new water source including a new water treatment plant on the Pamunkey River near Hickory Hill Road, intake in the Pamunkey River, 16 miles of large diameter piping between the water treatment plant and the existing Verdon Quarry, improvements to Verdon Quarry, two raw water pump stations and finished water piping to the existing water system. The planned amount in the current CIP is for design. Construction occurs outside the scope of the five-year plan.

USEFUL LIFE

50 years

TIMETABLE

Design in FY26 (Year 5).

OPERATING IMPACT

Increased operational costs are unknown at this time.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	-	-	500,000	500,000
Transfer from Public Utilities	-	-	-	-	500,000	500,000
Funding Uses	-	-	-	-	500,000	500,000
Professional Services	-	-	-	-	500,000	500,000

Water System Valve Improvements

DEPARTMENT

PU CIP Water

PROJECT TYPE

Utility Infrastructure

FUNCTIONAL AREA

Public Utilities

LOCATION

Various locations within the Hanover County
Suburban Water System

PROJECT DESCRIPTION

This project provides for the installation of new and the replacement of defective water valves throughout the water distribution system.

USEFUL LIFE

50 years

TIMETABLE

Construction in FY24 (Year 3) & FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	-	120,000	134,000	-	254,000
Transfer from Public Utilities	-	-	120,000	134,000	-	254,000
Funding Uses	-	-	120,000	134,000	-	254,000
Utilities Infrastruct Improve	-	-	120,000	134,000	-	254,000

School Improvements Fund Summary

FY22-FY26 Funding Sources by Project Type

	Construction	Equipment	Facility Improvements	Land Acquisition	Technology	Vehicles	Total
Bond Proceeds	44,100,000	2,945,000	9,830,000	3,000,000	-	-	59,875,000
Transfers In	-	-	1,977,562	-	14,622,438	7,000,000	23,600,000
Transfer fr GF - FBA Education	-	-	-	-	8,450,000	-	8,450,000
Transfer from General Fund	-	-	1,977,562	-	6,172,438	7,000,000	15,150,000
Total	44,100,000	2,945,000	11,807,562	3,000,000	14,622,438	7,000,000	83,475,000

FY22-FY26 Projects Funded by Long-term Debt

	Construction	Equipment	Facility Improvements	Land Acquisition	Technology	Vehicles	Total
Auditorium Renovations	-	-	700,000	-	-	-	700,000
Bathroom Renovations	-	-	790,000	-	-	-	790,000
Gymnasium Repairs	-	-	800,000	-	-	-	800,000
HVAC Repairs & Upgrades	-	-	2,945,000	-	-	-	2,945,000
Kitchen Renovations	-	-	445,000	-	-	-	445,000
Roof Repairs & Replacements	-	-	1,005,000	-	-	-	1,005,000
Safety & Security	-	2,945,000	-	-	-	-	2,945,000
School Building Upgrades	-	-	645,000	-	-	-	645,000
School Grounds Upgrades	-	-	2,500,000	-	-	-	2,500,000
School Renovation	44,100,000	-	-	-	-	-	44,100,000
School Site	-	-	-	3,000,000	-	-	3,000,000
Total	44,100,000	2,945,000	9,830,000	3,000,000	-	-	59,875,000

FY22-FY26 Projects Funded by the General Fund

	Construction	Equipment	Facility Improvements	Land Acquisition	Technology	Vehicles	Total
Painting	-	-	1,114,562	-	-	-	1,114,562
Roof Repairs & Replacements	-	-	863,000	-	-	-	863,000
School Buses	-	-	-	-	-	7,000,000	7,000,000
Technology Enhancements	-	-	-	-	14,622,438	-	14,622,438
Total	-	-	1,977,562	-	14,622,438	7,000,000	23,600,000

Auditorium Renovations

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Atlee High

PROJECT DESCRIPTION

Atlee High School auditorium will be renovated to include the installation of new seating, sound system, lighting, stage and curtains as well as cosmetic improvements to wall and floor finishes.

USEFUL LIFE

20 years

TIMETABLE

Atlee High School renovations in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	700,000	-	-	-	700,000
Bond Proceeds	-	700,000	-	-	-	700,000
Funding Uses	-	700,000	-	-	-	700,000
Alt to Facility or Office	-	700,000	-	-	-	700,000

Bathroom Renovations

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Cold Harbor and South Anna

PROJECT DESCRIPTION

Cold Harbor and South Anna Elementary Schools will have bathroom renovations to become fully compliant with the Americans with Disabilities Act (ADA). Renovations will only involve modifications above ground and will not include renovations to the plumbing and sewer infrastructure. Typical improvements will include: fixtures, tile, ceiling grid, paint, ventilation and minor structural changes to improve ADA accessibility.

USEFUL LIFE

20 years

TIMETABLE

Renovations to be completed in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	790,000	-	-	-	790,000
Bond Proceeds	-	790,000	-	-	-	790,000
Funding Uses	-	790,000	-	-	-	790,000
Alt to Facility or Office	-	790,000	-	-	-	790,000

Gymnasium Repairs

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Various

PROJECT DESCRIPTION

The schools scheduled for general improvements to athletic facility infrastructure are based on the FY13 School Facilities Assessment. These improvements are being done based on normal wear and fall within the reasonable expected lifetime of the component. Improvements include gym floor replacements, stage improvements and replacement of scoreboard and bleachers at Hanover High.

USEFUL LIFE

20 years

TIMETABLE

Repair and replacements to be completed in FY23 (Year 2).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	800,000	-	-	-	800,000
Bond Proceeds	-	800,000	-	-	-	800,000
Funding Uses	-	800,000	-	-	-	800,000
Alt to Facility or Office	-	800,000	-	-	-	800,000

HVAC Repairs & Upgrades

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Rural Point, Mechanicsville Elementary, Cool Spring, Oak Knoll and Patrick Henry

PROJECT DESCRIPTION

Heating, ventilation, and air conditioning (HVAC) systems used within school facilities require ongoing planned and unplanned maintenance and eventual replacement based on the predicted life of each unit. As an HVAC system approaches the end of its predicted life, staff review various factors to determine the timing for replacement. These factors include: the frequency of unplanned maintenance, the costs associated with unscheduled maintenance, the availability of spare parts, the cost and availability of the refrigerant and the energy efficiency of the unit.

USEFUL LIFE

20 years

TIMETABLE

Replacement of Rural Point HVAC and automation in FY23 (Year 2), remaining schools equipment replacement in FY25 (Year 4).

OPERATING IMPACT

Potential energy savings achieved through more energy efficient modern equipment.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	1,250,000	-	1,695,000	-	2,945,000
Bond Proceeds	-	1,250,000	-	1,695,000	-	2,945,000
Funding Uses	-	1,250,000	-	1,695,000	-	2,945,000
Building Accessory Equip Repl	-	1,250,000	-	1,695,000	-	2,945,000

Kitchen Renovations

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Various

PROJECT DESCRIPTION

Many schools are in need of new kitchen equipment. This project includes replacement of a hood exhaust system, walk-in refrigerator and freezer condenser, as well as replacement of ovens in schools as needed.

USEFUL LIFE

20 years

TIMETABLE

Replacement of equipment in FY23 (Year 2) and FY25 (Year 4).

OPERATING IMPACT

Potential energy savings achieved through more energy efficient modern equipment.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	75,000	-	370,000	-	445,000
Bond Proceeds	-	75,000	-	370,000	-	445,000
Funding Uses	-	75,000	-	370,000	-	445,000
Machinery & Equipment Repl	-	75,000	-	370,000	-	445,000

Painting

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Various

PROJECT DESCRIPTION

The schools scheduled for interior painting are based on the FY13 School Facilities Assessment. These improvements are being done based on normal wear and fall within the reasonable expected lifetime of the component.

USEFUL LIFE

20 years

TIMETABLE

Painting to be done annually.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	455,000	100,000	159,562	200,000	200,000	1,114,562
Transfer from General Fund	455,000	100,000	159,562	200,000	200,000	1,114,562
Funding Uses	455,000	100,000	159,562	200,000	200,000	1,114,562
Alt to Facility or Office	455,000	100,000	159,562	200,000	200,000	1,114,562

Roof Repairs & Replacements

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Various

PROJECT DESCRIPTION

Roofing systems used within school facilities require ongoing maintenance and eventual replacement based on the predicted life and manufacturer’s warranty for each structure. As a roofing system approaches the end of its predicted life, staff review the history of roof repairs and the unscheduled maintenance costs to determine the timing for the replacement.

This project includes annual funding for roof repairs at schools as needed. It includes additional funding in FY23 (Year 2) for roof replacements at Cool Spring, Elmont and Bell Creek; and in FY25 (Year 4) for roof replacements at Chickahominy, Patrick Henry, Mechanicsville Elementary and Pearson's Corner,

USEFUL LIFE

15 to 25 years

TIMETABLE

Roof repairs annually in Years 1-5. Roof replacements in FY23 (Year 2) and FY25 (Year 5).

OPERATING IMPACT

Potential energy savings achieved through building enhancements.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	100,000	593,000	200,000	675,000	300,000	1,868,000
Bond Proceeds	-	430,000	-	575,000	-	1,005,000
Transfer from General Fund	100,000	163,000	200,000	100,000	300,000	863,000
Funding Uses	100,000	593,000	200,000	675,000	300,000	1,868,000
Alt to Facility or Office	100,000	593,000	200,000	675,000	300,000	1,868,000

Safety & Security

DEPARTMENT

School CIP

PROJECT TYPE

Equipment

FUNCTIONAL AREA

Education

LOCATION

Various

PROJECT DESCRIPTION

Safety and security projects will focus on replacing fire suppression systems, updating door access and locks and adding vestibules, as well as updating the employee badge access system.

USEFUL LIFE

20 years

TIMETABLE

Repairs and replacements to occur in FY23 (Year 2) and FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	965,000	-	1,980,000	-	2,945,000
Bond Proceeds	-	965,000	-	1,980,000	-	2,945,000
Funding Uses	-	965,000	-	1,980,000	-	2,945,000
Building Accessory Equip Addtl	-	965,000	-	1,980,000	-	2,945,000

School Building Upgrades

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Various

PROJECT DESCRIPTION

This project includes funding for electrical service upgrades at the School Board Office, replacement of back-up generators at Mechanicsville High and Atlee High and replacement of an internal communications system at various locations.

USEFUL LIFE

15 to 25 years

TIMETABLE

Repairs and replacements to occur in FY23 (Year 2).

OPERATING IMPACT

Potential energy savings achieved through building enhancements.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	645,000	-	-	-	645,000
Bond Proceeds	-	645,000	-	-	-	645,000
Funding Uses	-	645,000	-	-	-	645,000
Alt to Facility or Office	-	645,000	-	-	-	645,000

School Buses

DEPARTMENT	PROJECT TYPE
School CIP	Vehicles
FUNCTIONAL AREA	LOCATION
Education	N/A

PROJECT DESCRIPTION

Regular bus replacement helps ensure reliability of daily transportation for students and helps control annual maintenance costs. School buses are replaced when they are unable to be practically repaired. Ideal replacement occurs when buses have been in service between 10 and 15 years, but replacement decisions are ultimately made by looking at the overall condition of each particular bus.

USEFUL LIFE

10 to 15 years

TIMETABLE

Buses to be purchased annually.

OPERATING IMPACT

Annual replacement of school buses removes the oldest, least efficient buses from the fleet and increases the operational efficiency and reliability of the fleet.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	1,000,000	1,500,000	1,500,000	1,500,000	1,500,000	7,000,000
Transfer from General Fund	1,000,000	1,500,000	1,500,000	1,500,000	1,500,000	7,000,000
Funding Uses	1,000,000	1,500,000	1,500,000	1,500,000	1,500,000	7,000,000
Motor Vehicle & Equipment Repl	1,000,000	1,500,000	1,500,000	1,500,000	1,500,000	7,000,000

School Grounds Upgrades

DEPARTMENT

School CIP

PROJECT TYPE

Facility Improvements

FUNCTIONAL AREA

Education

LOCATION

Various

PROJECT DESCRIPTION

The schools scheduled for general upgrades to exterior structures and grounds are based on the FY13 School Facilities Assessment. These projects include parking lot repairs and replacements at Atlee, Patrick Henry, Pearson's Corner and other locations as needed; irrigation system replacement at Mechanicsville High; and football stadium LED lighting at all 4 high schools.

USEFUL LIFE

20 years

TIMETABLE

Facility improvements to be completed in FY23 (Year 2) and FY25 (Year 4).

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	870,000	-	1,630,000	-	2,500,000
Bond Proceeds	-	870,000	-	1,630,000	-	2,500,000
Funding Uses	-	870,000	-	1,630,000	-	2,500,000
Alterations to Grounds	-	870,000	-	1,630,000	-	2,500,000

School Renovation/Replacement

DEPARTMENT

School CIP

PROJECT TYPE

Construction

FUNCTIONAL AREA

Education

LOCATION

Current John M. Gandy Elementary Site

PROJECT DESCRIPTION

Based on a facility analysis, several schools are in need of replacement or renovation. A new school will be constructed on the current John M. Gandy Elementary School property with design work beginning in FY22 (Year 1) and construction in FY23 (Year 2). Design for a replacement school at Battlefield Park Elementary will begin in FY26 (Year 5). There will be public input opportunities prior to the start of official design and construction.

USEFUL LIFE

50 years

TIMETABLE

Project will begin in FY22 (Year 1) with design and engineering work. Construction will begin in FY23 (Year 2). Battlefield Park Elementary design will begin in FY26 (Year 5).

OPERATING IMPACT

Potential changes in operational costs are not yet quantified. Costs will vary based on final design of the new school.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	4,000,000	36,000,000	-	-	4,100,000	44,100,000
Bond Proceeds	4,000,000	36,000,000	-	-	4,100,000	44,100,000
Funding Uses	4,000,000	36,000,000	-	-	4,100,000	44,100,000
Construction	4,000,000	36,000,000	-	-	4,100,000	44,100,000

School Site

DEPARTMENT

School CIP

PROJECT TYPE

Land Acquisition

FUNCTIONAL AREA

Education

LOCATION

To be determined

PROJECT DESCRIPTION

This project includes funding to purchase a secondary school site in eastern Hanover.

USEFUL LIFE

50 years

TIMETABLE

Project will begin in FY23 (Year 2).

OPERATING IMPACT

Changes in operational costs will occur outside the scope of the five-year plan.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	-	3,000,000	-	-	-	3,000,000
Bond Proceeds	-	3,000,000	-	-	-	3,000,000
Funding Uses	-	3,000,000	-	-	-	3,000,000
Land Purch & Development Addtl	-	3,000,000	-	-	-	3,000,000

Technology Enhancements

DEPARTMENT	PROJECT TYPE
School CIP	Technology
FUNCTIONAL AREA	LOCATION
Education	All schools

PROJECT DESCRIPTION

Technology enhancements include upgrading switches and wireless infrastructure as well as the purchase of devices for teachers. The upgrade of switches will replace existing switches that have exceeded their useful life. The upgrade of wireless infrastructure is necessary due to the increasing use of instructional devices. The purchase of laptops for teachers is included in FY22 (Year 1), FY23 (Year 2) and FY26 (Year 5). In addition to the new initiatives, ongoing technology equipment replacement and bandwidth for the existing network is included in this project.

USEFUL LIFE

5 years

TIMETABLE

Equipment to be purchased annually.

OPERATING IMPACT

Increased operational costs are not anticipated.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Funding Sources	1,445,000	2,237,000	1,140,438	5,200,000	4,600,000	14,622,438
Transfer fr GF - FBA Education	-	1,000,000	-	4,000,000	3,450,000	8,450,000
Transfer from General Fund	1,445,000	1,237,000	1,140,438	1,200,000	1,150,000	6,172,438
Funding Uses	1,445,000	2,237,000	1,140,438	5,200,000	4,600,000	14,622,438
Information System Equip Addtl	1,445,000	2,237,000	1,140,438	5,200,000	4,600,000	14,622,438

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