



# County of Fairfax, Virginia

## MEMORANDUM

DATE: December 13, 2017

TO: Board of Supervisors

FROM: Joseph M. Mondoro  
Chief Financial Officer/Director  
Department of Management and Budget (DMB)

SUBJECT: Capital Sinking Fund Status

In April 2013, the County and School Board formed a joint committee, the Infrastructure Financing Committee (IFC), to collaborate and review both the County and School's Capital Improvement Program (CIP) and infrastructure upgrade requirements. One of the goals of the Committee was to develop long-term maintenance plans for both the County and Schools, including annual requirements and reserves. The committee conducted a comprehensive review of critical needs and approved recommendations to support the development of a sustainable financing plan to begin to address current and future capital requirements. A Final Report was developed and approved by the Board of Supervisors on March 25, 2014, and the School Board on April 10, 2014. The Report included support for capital improvements, including the establishment of a capital sinking fund as a new budgetary mechanism for funding of Infrastructure Replacement and Upgrades requirements.

The Board of Supervisors first approved the establishment of the IFC recommended Capital Sinking Fund as part of the *FY 2014 Carryover Review*. The Board of Supervisors also approved the allocation of the total sinking fund based on specific percentages for each infrastructure area, including: 55 percent for FMD, 20 percent for Parks, 10 percent for walkways, 10 percent for County roads and service drives, and 5 percent for revitalization. These funds support prioritized critical infrastructure replacement and upgrades projects throughout the County.

To date, a total of \$26,767,431 has been dedicated to capital sinking funds and allocated for infrastructure replacement and upgrades in the following areas:

Area	Allocated through FY 2017	Allocated on September 12, 2017	Total
FMD	\$8,157,795	\$6,564,291	\$14,722,086
Parks	\$2,966,470	\$2,387,015	\$5,353,485
Walkways	\$1,483,237	\$1,193,507	\$2,676,744
County Roads	\$1,483,237	\$1,193,507	\$2,676,744
Revitalization	\$741,618	\$596,754	\$1,338,372
Total	\$14,832,357	\$11,935,074	\$26,767,431

The breadth of the infrastructure upgrades and benefits of the sinking fund allocations can be seen in the significant accomplishments throughout the County. Many projects have been initiated or completed in all of these program areas. This update focuses on the funding allocations approved prior to approval of the *FY 2017 Carryover Review* on September 12, 2017. A list of the projects completed or currently underway is included as Attachment A. In addition, several photographs including before and after pictures has been included as Attachment B.



### FMD

The Sinking Fund has enabled FMD to complete upgrades and repairs to major building subsystems throughout the County. FMD is currently responsible for an inventory of 246 buildings. As the inventory of County facilities ages, reinvestment in buildings and building equipment becomes critical. Currently, 64 percent of the buildings for which FMD has responsibility are over 20 years old. Per industry standards, most building systems require replacement at 20 to 25 years of age. Infrastructure replacement and upgrades extend the serviceability and life of a building and provide for the continued effective, efficient and safe operation of a building. These needs vary by building size and type, the extent of facility use, and maintenance management. All of the projects supported by Sinking Fund dollars were prioritized as Category F: urgent/safety related, or endangering life and/or property. FMD has initiated several larger scale projects with the allocated Sinking Fund, including: HVAC system component replacements at the Patrick Henry Library and Building Automation System replacement at the Herndon Fortnightly Library; emergency back-up generator replacements at the Government Center, Pennino, and Herry buildings; roof repairs and waterproofing at the Pennino building, James Lee Community Center and Bailey's Community Center; windows replacement at the Hollin Hall building; structural repairs at the Patrick Henry Library; and a structural analysis and review of the visitor garage at the Fairfax County Judicial Center. Additional Category F projects are being prioritized for use of the additional \$6,564,291 approved as part of the *FY 2017 Carryover Review*.

### Parks

The Sinking Fund has enabled Parks to address the backlog of reinvestment requirements at deteriorating facilities, athletic courts, pedestrian bridges, parking lots, and trails located throughout the County. The Park Authority is responsible for 374 structures at 427 Parks with 58 percent of this total inventory over 30 years old. To date, the Park Authority has completed trail, bridge and tennis court repairs throughout the county, parking lot and roadway repairs at Nottoway Park, Lake Accotink Park, and many other capital improvements.

In FY 2016, in support of the goals of the IFC, the Park Authority also created a Sinking Fund for revenue supported facilities within Fund 80300, Park Improvement Fund, and made a one-time allocation of \$2.2 million. Additional funds, if available, are allocated to the Revenue Facilities Sinking Fund from year end Park net revenues. Major project allocations have included: Pool, HVAC and elevator repairs/replacements at RECenters (\$1.6 million), building and HVAC repairs at Golf Courses (\$.36 million), and renovation work at Lakefront parks (\$.20 million).

### County-Owned Roads

The County is responsible for emergency safety and road repairs to County-owned service drives and County-owned stub streets which are currently not accepted in the Virginia Department of Transportation (VDOT) highway system for maintenance. The County is currently responsible for 38 miles of roadways, valued at over \$230 million. On-going road repairs often include: pothole repair, pavement rehabilitation, sidewalk and curb repairs, traffic and pedestrian signage, hazardous tree removal, grading, patching, and stabilization of shoulders. The 2015 Rinker study identified an amount of \$4 million in reinvestment funding requirement for the roadways with the most hazardous conditions, continued reinvestment funding and increased annual funding for emergency repairs. A 5-Year Plan was developed to address the \$4 million initial reinvestment program, estimating \$800,000 per year. The Sinking Fund allocation has provided \$1.5 million of the \$1.6 million estimated for the first 2 years of the 5-Year Plan. The additional funds of \$1,193,507 approved as part of the *FY 2017 Carryover Review*, will bring the total to \$2.7 million, leaving approximately \$1.3 million of the initial identified reinvestment requirements remaining to be funded. Once this initial backlogged reinvestment has been completed, it is anticipated that staff will re-assessed the status of the program and develop the next multi-year plan to continue needed reinvestment to address those roads not yet considered hazardous and to sustain the Program in the future.



### Walkways

The County manages approximately 675 miles of walkways and 69 pedestrian bridges, valued at an estimated \$220 million. This inventory includes 63 percent of walkways that are over 19 years old. Projects are prioritized based on condition as well as pedestrian usage. On-going repairs provide for upgrades required for public standards, address safety and hazardous conditions, and provide for the rehabilitation of pedestrian bridges. Damaged trail surfaces, retaining wall failures, and handrail repairs are just a few of the common issues. The 2013 Rinker Study revealed approximately 10 miles of trails in extremely poor condition requiring \$3 million in reinvestment, continued reinvestment funding and increased annual maintenance funding. A 3-Year Plan was developed to address the \$3 million initial reinvestment program estimating approximately \$1 million per year. The Sinking Fund allocation has provided \$1.5 million of the \$2.2 million estimated for the first 2 years of the 3-Year Plan. The additional funds of \$1,193,507 approved as part of the *FY 2017 Carryover Review*, will bring the total to \$2.7 million, leaving approximately \$300,000 of the initial identified reinvestment requirements remaining to be funded. Once this initial backlogged reinvestment has been completed, it is anticipated that staff will re-assessed the status of the program and develop the next multi-year plan to continue needed reinvestment and determine the appropriate annual funding level to sustain the Program in the future.

### Revitalization

The five geographical areas in the County that are defined as Commercial Revitalization Districts (CRDs) include: Annandale, Baileys/Seven Corners, McLean, Route 1 and Springfield. These five CRDs total 821,521 square feet. Both routine (trash removal, quality control inspections, grass mowing, edging, pruning, mulching, bus shelter glass cleaning, pest control, leaf removal) and non-routine improvement projects are conducted annually. The non-routine improvements in the CRDs include: under grounding utilities; roadway design and construction; and, streetscape improvements that consist of new paver sidewalks, street furnishings, signage, and bus shelters. Several of these non-routine improvement projects have been initiated in the CRDs with the sinking fund allocation and have been focused on sidewalk and bus shelter repairs. There are 20 bus shelters that have been identified to be replaced throughout the County by spring 2018. The Bailey's Sidewalk rehabilitation and Bland Street Public Private Partnership projects are currently underway and include infrastructure repairs such as retaining walls, brick paver repairs, stair relocations and sidewalk redesigns. Staff continues to work on a longer term implementation plan for infrastructure maintenance in the CRDs as supported by the Board of Supervisors.

In summary, the Sinking Fund allocations have enabled agencies to continue much of the important replacement and upgrade work required at facilities throughout the County. Each program area is currently working on prioritizing the next set of projects for reinvestment based on the additional funds provided as part of the *FY 2017 Carryover Review*. Future status updates regarding the use of additional sinking funds will be provided to the Board of Supervisors periodically.

Attachment A

Attachment B

Cc: Kirk Kincannon, Acting County Executive  
Patricia Harrison, Deputy County Executive  
David Molchany, Deputy County Executive  
David M. Rohrer, Deputy County Executive  
Robert A. Stalzer, Deputy County Executive  
Jose Comayagua, Director, Facilities Management Department  
Sara Baldwin, Acting Director, Park Authority  
James Patteson, Director, DPWES  
Randy Bartlett, Deputy Director, DPWES  
Barbara Byron, Director, Office of Community Revitalization

# Use of Sinking Fund Allocations Through FY 2017

Project	Amount
<b>FMD Total Allocation</b>	<b>\$8,157,795</b>
Partial Funding for Government Center Generator Replacement	\$4,607,153
Pennino Roof Repairs	\$300,000
James Lee Community Center Roof Repairs	\$300,000
Patrick Henry Library Air Handling Unit Replacement	\$135,000
Patrick Henry Library Caulking of Building Envelop	\$175,000
Hollin Hall Window Replacement	\$650,000
Herndon Library HVAC and Lighting Controls	\$400,000
Pennino Generator Replacement	\$675,000
Bailey's Community Center Caulking of Building Envelop	\$100,000
Herrity Generator Replacement	\$665,000
Judicial Center Visitor Garage Structural Analysis	\$100,000
Remaining funds for FY 2018	<u>\$50,642</u>
 <b>Parks Total Allocation</b>	 <b>\$2,966,470</b>
Hooes Road Park Tennis Court	\$192,905
J.E.B. Stuart Park Tennis Court	\$27,092
Lakeside Park Basketball Court	\$31,417
McLean Central Park Tennis Court	\$19,307
Borge Street Park Trail	\$5,138
Broyhill Crest Park Bridge Replacement	\$51,910
Churchill Road Park Trail	\$42,533
Holmes Run Stream Valley Park Trail	\$27,756
Idylwood Park Trail	\$12,598
Lake Accotink Park Roadway	\$339,949
Mosby Woods Park Trail	\$3,364
Nottoway Park Parking Lot, Roadway and Trail	\$747,880
Parklawn Park Trail	\$11,486
Roundtree Park Bridge Replacement	\$69,595
South Run Stream Valley Park Bridge Replacement	\$69,595
Woodlawn Park Trail	\$10,434
Fort Hunt Park Trail	\$8,273
Horsepen Run SV Park Trail	\$112,347
Kirk Park Trail	\$9,217
Pine Ridge Park Trail	\$17,724
Pohick SV Park Trail	\$36,104
Rolling Wood Park Trail	\$27,755
Saratoga Park Trail	\$10,971
Stoneybrooke Park Trail	\$15,985
Tysons Pimmit Park Trail	\$38,174
Lake Accotink Park Culvert Replacement	\$340,000
Flat Lick Salt Dome	\$53,063



Removal of Braddock Mini-Golf Facility	\$58,143
Removal of Tennis Court at Cardinal Forest	\$35,614
Nottaway Fit Stations	\$91,085
Countywide Bridge Replacements (TBD)	\$99,000
Countywide Trail Repairs (TBD)	\$126,719
Countywide Parking Lot/Roadway Repairs	\$223,337
Remaining funds for FY 2018	\$0

### **County-Owned Roads Total Allocation** **\$1,483,237**

First year of a 5-year (\$800,000 per year )reinvestment program for roadways with the most hazardous conditions, 2015 Rinker Study	\$800,000
Partial funding for second year of reinvestment program	\$683,237
Remaining funds for FY 2018	\$0

### **Walkways Total Allocation** **\$1,483,237**

Partial Funding for the first year of a 3-year (\$1,000,000 per year) reinvestment program for walkways in the poorest condition, 2013 Rinker Study	\$800,000
Partial funding for second year of reinvestment program	\$683,237
Remaining funds for FY 2018	\$0

### **Revitalization Total Allocation** **\$741,618**

20 bus stop repairs	\$200,000
Bailey Sidewalk Rehabilitation	\$200,000
Bland Street Rehabilitation	TBD
Remaining funds for FY 2018	\$341,618

**TOTAL** **\$14,832,357**

# Parks Sinking Fund Projects



# Athletic Court Repairs

Hooes Road Park Tennis Court Renovation  
Lee District

Issue: Reflective cracking and water issue under four courts.



Solution: Milled court surface and use milling byproduct as base for new court. Replaced fencing and net posts.



# Athletic Court Repairs

J.E.B. Stuart Park Tennis Court Repairs  
Mason District

Issue: Cracks and worn surface affecting play of all four courts.



Solution: Repair cracks, seal, and color coat.





# Athletic Courts

## Lakeside Park Basketball Court Renovation Braddock District

Issue: Rough and cracking surface, old goal standards on basketball court.



Solution: Applied stone dust overlay and installed new goal standards.



# Athletic Court Repairs

McLean Central Park Tennis Court Repairs  
Dranesville District

Issue: Numerous cracks and worn surface on three courts.



Solution: Repair cracks, seal, and color coat three courts.





# Trail Repairs

Borge Street Park  
Providence District

Issue: Tree roots resulted in wide spread uneven pavement.



Solution: Removed tree roots and paved 420 linear feet of surface.





# Pedestrian Bridge Replacement

## Broyhill Crest Park Bridge Replacement Mason District

Issue: Existing bridge was past its useful life and no longer safe due to widening of stream and erosion of foundations at stream banks.



Solution: Replaced the existing bridge with a 40'x6' pre-engineered fiberglass pedestrian bridge on helical screw anchor foundations with ramped trail connections and stream bank stabilization.





# Trail Repairs

Churchill Road Park  
Dranesville District

Issue: Trail system provides access for students to both the elementary and middle schools. All asphalt in the park was deteriorating causing a walking hazard.



Solution: Paved 3,363 linear feet of surface.





# Trail Repairs

## Churchill Road Park Dranesville District

Issue: The concrete culvert and embankment were failing, causing the trail to collapse.



Solution: The concrete culvert was replaced and the embankment was shored up. New base was installed for the asphalt trail.





# Trail Repairs

Holmes Run Stream Valley Park/Providence Rec. Center  
Mason & Providence Districts

Issue: Severe upheaval from tree roots throughout trail system resulted in uneven trail and flooding issues.



Solution: Paved 2,371 linear feet of trails behind Providence RECenter to connect three communities to the RECenter.





# Trail Repairs

Idylwood Park  
Providence District

Issue: Trail had shoulder erosion and a rough and uneven surface.



Solution: Paved 1000 linear feet of trail connecting the parking lot to WO&D trail and amenities.





# Roadway Renovations

Lake Accotink Park  
Braddock District

Issue: Entrance Road asphalt surfaces reached end of lifecycle and were degraded by potholes, tree roots, and rough, uneven surface throughout.



Solution: Milled existing asphalt, improved base and repaved the the entrance road.





# Trail Repairs

Mosby Woods Park  
Providence District

Issue: Tree roots erupting through the trail created safety hazards and low areas flooded.



Solution: Raised, widened, and paved 200 linear feet of trail.





# Parking Lots, Roadway, and Trail Improvements

Nottoway Park  
Providence District

Issue: All asphalt surfaces were degraded by potholes, tree roots, and rough, uneven surface throughout.



Solution: Removed asphalt, improved base and repaved all areas. Curb and gutters were repaired/replaced. Multiple projects involved.





# Asphalt Trail Work

Nottoway Park  
Providence District

Issue: Uneven, narrow gravel path connecting tennis courts to lower parking lot.



Solution: Widened, leveled and asphalted gravel path to connect to existing asphalt paths and parking lot.





# Gravel Trail Improvements

Nottoway Park  
Providence District

Issue: Uneven, washout out, and low material on all gravel trails throughout the park.



Solution: Replaced culvert pipes, added gravel, graded and compacted all gravel trails.





# Culvert Replacement

Nottoway Park  
Providence District

Issue: Culverts were rusted through on the bottom causing the trail to collapse on top.



Solution: Replaced culverts with single culvert and re-established trail on top. Asphalt replaced as well.





# Roadway Improvements

## Nottoway Park ADA Enhancements

### Providence District

Issue: Non-compliant ADA cross-walk and roadway in poor condition.



Solution: Crosswalk slopes corrected for ADA compliance. Asphalted and marked the entire area.





# Trail Work

## Nottoway Park ADA Enhancements Providence District

Issue: Deteriorating trail and non-compliant ADA crosswalk at entrance of park.



Solution: Repaved trail along Courthouse Road, brought cross-walk into ADA compliance and restriped.





# Trail Work

Nottoway Park  
Providence District

Issue: Deteriorating, uneven asphalt trail along Courthouse Rd.



Solution: Widened, leveled and repaved the trail.





# Trail Repairs

Parklawn Park  
Mason District

Issue: Tree roots erupting through trail surface caused safety hazards.



Solution: Removed tree roots and repaved 900 linear feet of trail.





# Pedestrian Bridge Replacement

## Roundtree Park Bridge Replacement Mason District

Issue: Existing bridge had been previously removed as it was no longer safe due to widening of stream and erosion of foundations at stream banks.



Solution: Replaced the existing bridge with a 40'x6' pre-engineered fiberglass pedestrian bridge on helical screw anchor foundations with concrete ramps and stream bank stabilization.





# Pedestrian Bridge Replacement

## South Run Stream Valley Trail Bridge Replacement Springfield District

Issue: Existing bridge was severely damaged due to storm events and no longer safe due to widening of stream and erosion of foundations at stream banks.



Solution: Replaced the existing bridge with a 40'x8' pre-engineered fiberglass pedestrian bridge on helical screw anchor foundations with concrete ramps and stream bank stabilization.





# Trail Repairs

Woodlawn Park  
Mount Vernon District

Issue: Asphalt trail was creating a rough and uneven surface throughout the park.



Solution: Repaved all trails (2,287 linear feet) in the park.



# Trail Repairs

Fort Hunt Park  
Mount Vernon District

Issue: Narrow, uneven and cracking asphalt throughout trail.



Solution: Widened the trail and paved 675 linear feet.





# Trail Repairs

Horsepen Run Stream Valley Park  
Hunter Mill & Sully Districts

Issues: Uneven and cracked pavement and trail flooding caused by erupting tree roots.



Solution: Removed tree roots, raised trail and paved 5,774 linear feet of trail.





# Trail Repairs

Kirk Park  
Mount Vernon District

Issue: Trail breakdown and uneven asphalt caused by erupting tree roots.



Solution: Removed tree roots, repaired and repaved 560 linear feet of asphalt.





# Trail Repairs

Pine Ridge Park  
Mason District

Issue: Uneven asphalt due to tree roots and general trail deterioration.



Solution: Removed tree roots, repaired and repaved 700 linear feet of asphalt trail.



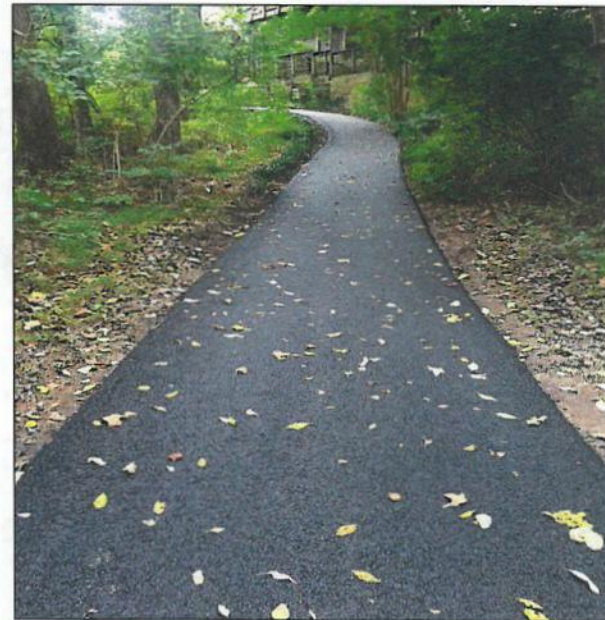
# Trail Repairs

Pohick Stream Valley Park-Poplar Spring Court (Liberty Bell Trail Connector)  
Braddock & Mount Vernon Districts

Issue: Trail is uneven due to tree roots and the eroding shoulder.



Solution: Remove tree roots and paved 830' of asphalt trail. Connected existing trail to new Liberty Bell Trail.





# Trail Repairs

Pohick Stream Valley Park-Neighborhood connectors to the CCT (near Pohick Road)  
Braddock & Mount Vernon Districts

Issues: Eroding and uneven trails.



Solution: Removed old trail, add base, pave new trail connectors and perform shoulder repairs to the CCT. A total of 950' of asphalt trail was paved.





# Trail Repairs

Rolling Wood School Site Park  
Mount Vernon District

Issue: Uneven asphalt due to erupting tree roots throughout the trail system.



Solution: Removed tree roots, repaired and repaved 1,961 linear feet of asphalt trail.





# Trail Repairs

Saratoga Park  
Mount Vernon District

Issue: Aging and deteriorating asphalt throughout trail.



Solution: Repaired and repaved 878 linear feet of asphalt trail.





# Trail Repairs

Stoneybrooke Park

Lee District

Issue: Rough and deteriorating asphalt throughout the trail.



Solution: Repaired and repaved 700 linear feet of asphalt trail.





# Trail Repairs

Tysons Pimmit Park  
Dranesville District

Issues: Uneven and deteriorating asphalt throughout the trail.



Solution: Remove, repair and replace sections of trail where necessary. Repaved 2,168 linear feet of asphalt trail.





# Culvert Replacement

Lake Accotink Park  
Braddock District

Issue: Existing civil war era culvert under access road was failing causing the roadway to collapse on top.



Solution: Replaced existing culvert with modern concrete pipe culvert, repaved access road and stabilized shoulders and drainage outlet.

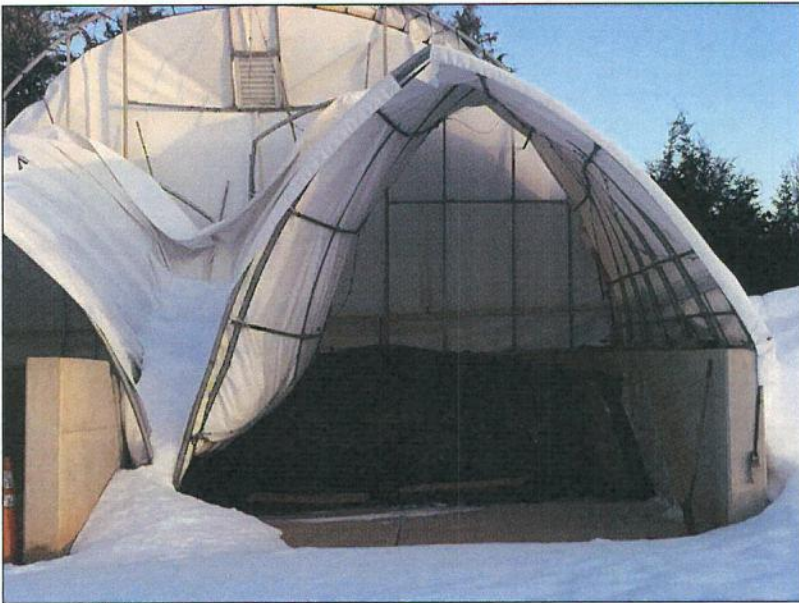




# Salt Dome Replacement

Flat Lick  
Sully District

Issue: Salt dome collapsing and no longer capable of safely storing corrosive materials.



Solution: Replaced collapsing salt dome.



# FMD Sinking Fund Projects



# Government Center Generator Replacement

## Braddock District

Emergency Power System at the Fairfax County Government Center was installed in 1992. The system was obsolete, did not meet current code, and was maintenance intensive.



# Hollin Hall Window Replacement

Mt Vernon District

Issue: The exterior windows were original to the building, installed in 1950. The windows were steel framed, single paned glass and did not seal or shut properly. Water was infiltrating at the steel lintels, frames were rusted on the interior and exterior, and all windows had failed sealant.



Before



After





# James Lee Community Center Roof

## Mason District

This project replaced the white reflective roof coating, roof section, base flashing, and expansion joints.

Before



Construction Underway



# Kings Park Board of Supervisor's Wing Roof

## Braddock District

This project included replacement of the base flashing, expansion joints and re-work of the drains and equipment curbs. The standing seam metal roof at the library side was built in 1992 had started to rust. This project re-coated/painted the metal roof.

Before



Construction Underway

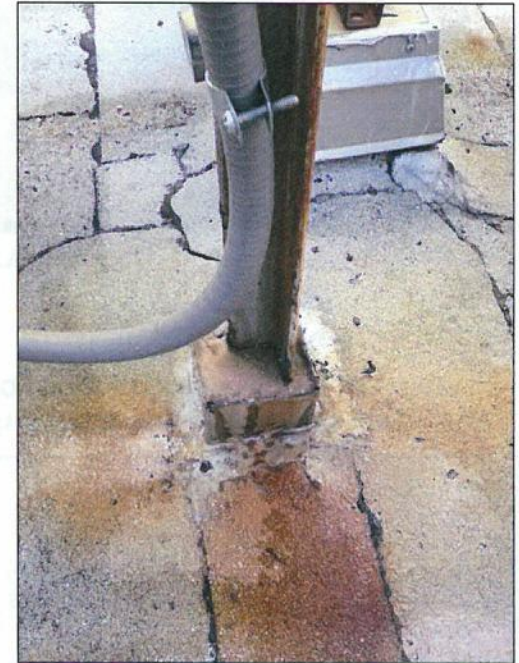
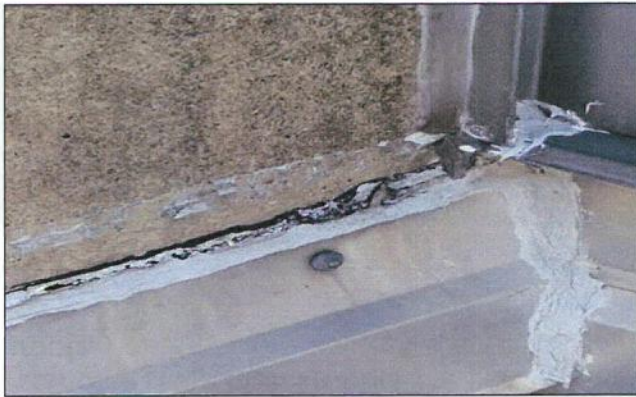




# Pennino Building Roof: Underway

## Braddock District

The entire roof will be resurfaced with a high-performance acrylic coating to keep solar heat out of the building, slow down roof aging, and extend the life of the roofing system.

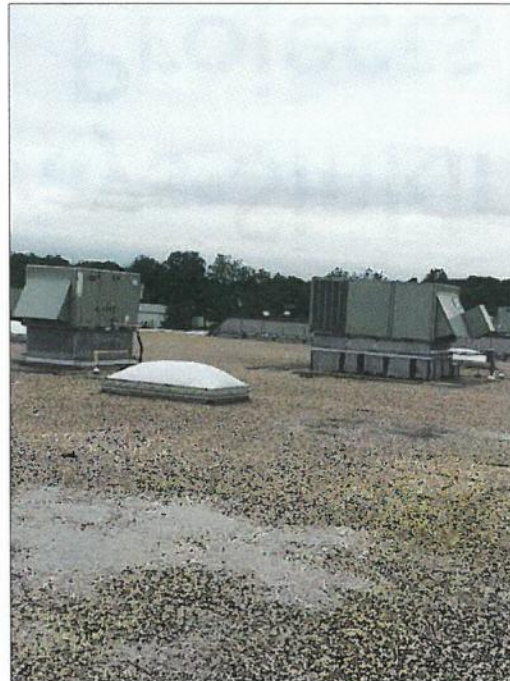




# Springfield Warehouse: Underway

## Mason District

The entire roof will be resurfaced with a high-performance acrylic coating to keep solar heat out of the building, slow down roof aging, and extend the life of the roofing system.



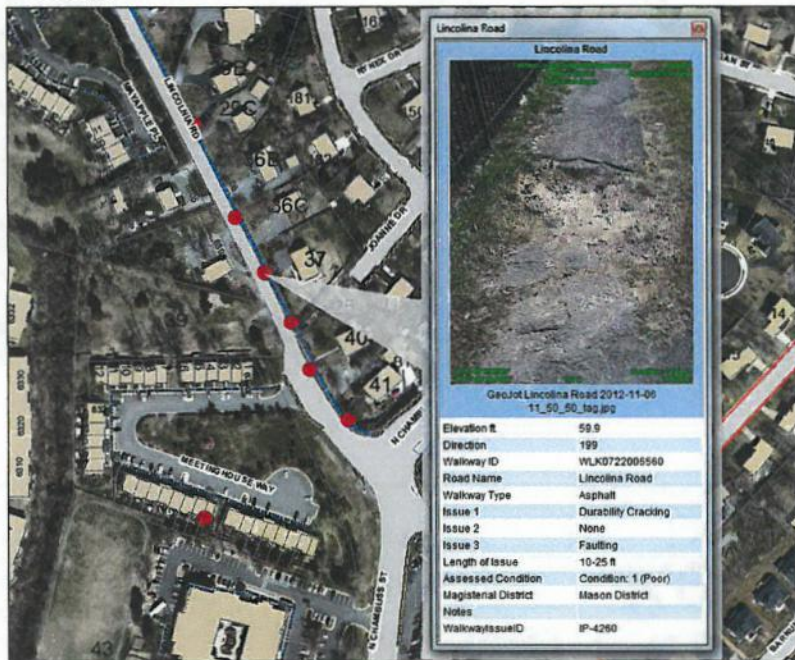


# Walkways Sinking Fund Projects

# 6318 Lincolnia Road

Mason District

Before



After





# Piney Run Route 7 Pedestrian Bridge Rehabilitation

Dranesville District

Before



After



# Roads Sinking Fund Projects



# 5240 Leesburg Pike

Mason District

Before



After



# Loehman's Plaza Service Drive

Mason District

Before



After





# Revitalization Sinking Fund Projects

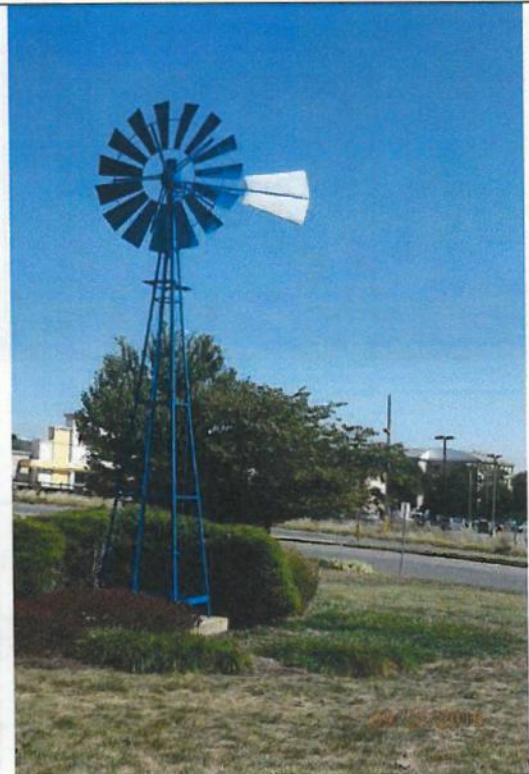
# Bailey's Windmill

Mason District

Before



After





# Annandale Post Office

Mason District

Before



After



# Annandale Service Drive

Mason District

Before



After





# Bailey's Sidewalk Rehabilitation- Future Project

Mason District



# Bland Street- Future Project

## Springfield District

