

**STORMWATER MANAGEMENT: STORMWATER INFRASTRUCTURE/
CAPACITY IMPROVEMENTS**

10 YEAR CATEGORY SUMMARY (in \$1,000s)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	10 Year Total
1. 33rd Street North to Williamsburg Capacity	155	1,050	1,080	925	1,125	0	0	0	0	0	4,335
2. Capacity Project Feasibility Studies	150	150	155	155	160	160	165	165	170	170	1,600
3. Cardinal School Stormwater-Lexington Connection	380	0	0	0	0	0	0	0	0	0	380
4. Columbia Pike at Greenbrier	1,300	1,155	775	8,240	4,770	0	0	0	0	0	16,240
5. Crossman Run Watershed Capacity Improvements	2,320	1,960	465	13,155	10,600	0	0	0	0	0	28,500
6. Flood Resiliency Design & Construction Guidelines	300	0	0	0	0	0	0	0	0	0	300
7. Flood Risk Reduction Program	1,450	1,500	1,545	2,025	2,860	980	1,010	1,035	1,060	1,060	14,525
8. Langston Boulevard Culvert at North Sycamore	290	2,440	1,480	925	1,905	0	0	0	0	0	7,040
9. Lower Long Branch Flood Risk Reduction Project	0	0	0	0	0	1,155	1,190	1,220	1,255	1,255	6,075
10. Lubber Run Watershed Capacity Improvements	1,500	1,500	1,905	155	4,920	4,855	4,570	11,930	10,640	7,480	49,455
11. Miscellaneous Expansion/ Capacity Projects	0	300	0	310	0	320	0	325	0	335	1,590
12. North Thomas Street	150	255	850	1,060	0	0	0	0	0	0	2,315
13. Spout Run Watershed Capacity Improvements	5,150	13,445	8,485	8,395	8,640	8,640	7,000	6,005	6,175	5,055	76,990
14. Stohman's Run Watershed Capacity Improvements	300	500	1,235	0	0	0	0	0	0	0	2,035
15. Torreyson Run Watershed Capacity Improvements	340	2,165	2,225	2,515	3,585	3,900	0	0	0	0	14,730
16. Williamsburg at North Underwood Capacity	150	815	880	1,030	0	0	0	0	0	0	2,875
Total Recommendation	13,935	27,235	21,080	38,890	38,565	20,010	13,935	20,680	19,300	15,355	228,985

CATEGORY FUNDING SOURCES (in \$1,000s)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	10 Year Total
New Funding											
Federal Funding	0	0	0	0	0	0	0	0	0	0	0
State Funding	0	0	0	0	0	0	0	0	0	0	0
Developer Contributions	0	0	0	0	0	0	0	0	0	0	0
New Bond Issue	0	8,455	20,925	38,780	38,565	20,010	13,935	20,680	19,300	15,355	196,005
PAYG	0	0	0	0	0	0	0	0	0	0	0
Short Term Finance	0	0	0	0	0	0	0	0	0	0	0
Stormwater Utility Fee Revenue	150	450	155	110	0	0	0	0	0	0	865
Other Funding	0	0	0	0	0	0	0	0	0	0	0
Subtotal New Funding	150	8,905	21,080	38,890	38,565	20,010	13,935	20,680	19,300	15,355	196,870
Previously Approved Funding											
Authorized but Unissued Bonds	12,130	18,330	0	0	0	0	0	0	0	0	30,460
Issued but Unspent Bonds	0	0	0	0	0	0	0	0	0	0	0
Other Previously Approved Funds	1,655	0	0	0	0	0	0	0	0	0	1,655
Subtotal Previously Approved Funding	13,785	18,330	0	0	0	0	0	0	0	0	32,115
Total Funding Sources	13,935	27,235	21,080	38,890	38,565	20,010	13,935	20,680	19,300	15,355	228,985



1. 33RD STREET NORTH TO WILLIAMSBURG CAPACITY

Project Highlights:

- This is a watershed-scale project in the Little Pimmit Run watershed to increase capacity by connecting previously constructed storm drain improvements from the cul-de-sac at 33rd Street North to Williamsburg Boulevard.
- Land acquisition is required.
- Pipes experience capacity issues - expansion currently restrained by small easements and other nearby utilities.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Rock Spring

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue		1,050	1,080	925	1,125						4,180
Previous Funding											
Authorized but Unissued Bonds	155										155
Total Funding	155	1,050	1,080	925	1,125	0	0	0	0	0	4,335
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design FY 2023 - FY 2025
- Construction FY 2026 - FY 2027



2. CAPACITY PROJECT FEASIBILITY STUDIES

Project Highlights:

- Planning and feasibility studies provide an integrated approach to proper scoping of potential projects.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

VARIOUS

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue				45	160	160	165	165	170	170	1,035
Stormwater Utility Fee Revenue		150	155	110							415
Previous Funding											
Other Previously Approved Funds	150										150
Total Funding	150	150	155	155	160	160	165	165	170	170	1,600
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0



3. CARDINAL SCHOOL STORMWATER-LEXINGTON CONNECTION

Project Highlights:

- Cardinal School- North Lexington Street stormwater connection is required for full functional capacity of the Cardinal Elementary School stormwater detention vaults in the Torreyson Run watershed.
- Protects Westover commercial area.
- Watershed scale project; part of the watershed plan.
- Entails significant coordination and cooperation with Arlington Public Schools.

Associated Plan(s):

- Storm Water Master Plan
- Watershed Management Plan

Neighborhood(s):

- Highland Park-Overlee Knoll
- Tara-Leeway Heights
- Westover Village

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Previous Funding											
Authorized but Unissued Bonds	380										380
Total Funding	380	0	0	0	0	0	0	0	0	0	380
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design FY 2022
- Construction FY 2023

Project Links:

- Cardinal School Stormwater project page: <https://projects.arlingtonva.us/projects/reed-school-stormwater-vault/>

Changes from Prior CIP:

This project is new for this CIP; it was identified as necessary during Phase 2 design of the Cardinal School detention vault project.



4. COLUMBIA PIKE AT GREENBRIER

Project Highlights:

- To help mitigate frequent and severe flooding, this project involves a combination of increased system capacity and efficiency (identified for Critical Vulnerability).
- Easements will likely be required to complete the necessary improvements.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Columbia Forest

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue		690	775	8,240	4,770						14,475
Previous Funding											
Authorized but Unissued Bonds	1,300	465									1,765
Total Funding	1,300	1,155	775	8,240	4,770	0	0	0	0	0	16,240
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Feasibility Study FY 2022
- Design FY 2023 - FY 2025
- Construction FY 2026 - FY 2027

Changes from Prior CIP:

New project for this CIP.



5. CROSSMAN RUN WATERSHED CAPACITY IMPROVEMENTS

Project Highlights:

- Watershed scale solutions to flooding and drainage issues (identified for Critical Vulnerability).
- Solutions may include a combination of pipe upgrades, new conveyance systems, and underground detention vaults.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Arlington-East Falls Church
Williamsburg

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue		1,960	465	13,155	10,600						26,180
Previous Funding											
Authorized but Unissued Bonds	2,320										2,320
Total Funding	2,320	1,960	465	13,155	10,600	0	0	0	0	0	28,500
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design FY 2023 - FY 2026
- Construction Commences FY 2023 - FY 2027

Changes from Prior CIP:

The size, scope, and timing of this project has increased from the prior CIP.



6. FLOOD RESILIENCY DESIGN & CONSTRUCTION GUIDELINES

Project Highlights:

- The Flood Resiliency Design and Construction Guidelines Manual was approved by the County's Stormwater Inter-Departmental Working Group as a key action.
- Guidelines will be voluntary in the initial phase.
- Areas targeted for resiliency design and construction will be identified by Risk Assessment & Management Plan (RAMP) Study.
- Will address both residential and commercial design and construction measures, techniques, policies and mechanisms.
- Project includes active engagement with the public and key stakeholders in real estate, architecture, construction, appraisals and insurance.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

VARIOUS

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Previous Funding											
Other Previously Approved Funds	300										300
Total Funding	300	0	0	0	0	0	0	0	0	0	300
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0



7. FLOOD RISK REDUCTION PROGRAM

Project Highlights:

- This program implements the capacity and flood risk reduction project priorities identified in the 2014 Stormwater Master Plan or areas which have experienced repeated flooding.
- The projects in this program may not be watershed scale in scope.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

VARIOUS

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue		1,500	1,545	2,025	2,860	980	1,010	1,035	1,060	1,060	13,075
Previous Funding											
Authorized but Unissued Bonds	245										245
Other Previously Approved Funds	1,205										1,205
Total Funding	1,450	1,500	1,545	2,025	2,860	980	1,010	1,035	1,060	1,060	14,525
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0



8. LANGSTON BOULEVARD CULVERT AT NORTH SYCAMORE

Project Highlights:

- Watershed scale project to increase capacity of culverts crossing Langston Boulevard at North Sycamore Street. Project is additional phase of previous project.
- Project will improve hydraulic capacity of existing culverts and piped systems, including elements such as increased pipe diameters, detention, green overland flow, and pump systems.
- Land acquisition required.
- Project will coordinate with Transportation for improvements to the intersection.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

VARIOUS

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue		2,440	1,480	925	1,905						6,750
Previous Funding											
Authorized but Unissued Bonds	290										290
Total Funding	290	2,440	1,480	925	1,905	0	0	0	0	0	7,040
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design FY 2023 - FY 2024
- Construction FY 2024 - FY 2027

Changes from Prior CIP:

Langston Boulevard was previously named Lee Highway.



9. LOWER LONG BRANCH FLOOD RISK REDUCTION PROJECT

Project Highlights:

- Alternatives are being evaluated to reduce the risk of flooding along Lower Long Branch from South Glebe Road to 26th Street South.
- Project scope may be adjusted due to forthcoming revised Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM). Project has potential to remove properties from FEMA floodplains.
- Project impacts Troy Park.

Associated Plan(s):

Storm Water Master Plan
 Watershed Management Plan

Neighborhood(s):

Long Branch Creek

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue						1,155	1,190	1,220	1,255	1,255	6,075
Previous Funding											
Total Funding	0	0	0	0	0	1,155	1,190	1,220	1,255	1,255	6,075
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Develop public outreach plan FY 2024
- Develop and refine concept plans FY 2025
- FEMA studies FY 2026
- Rescope project and initiate final designs FY 2027

Changes from Prior CIP:

The size and scope of this project has increased from the prior CIP and the timing has been pushed due to revised FEMA flood plain maps and models.



10. LUBBER RUN WATERSHED CAPACITY IMPROVEMENTS

Project Highlights:

- Watershed scale improvements in multiple locations. Project areas experienced repeated and -in some cases- extreme flooding (identified for Critical Vulnerability).
- Acquisition of rights-of-ways are required.
- Solution may include a combination of pipe upgrades, new conveyance lines, and underground detention.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Bluemont
Glebewood
John M. Langston
Tara-Leeway Heights
Waycroft-Woodlawn

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue			1,905	155	4,920	4,855	4,570	11,930	10,640	7,480	46,455
Previous Funding											
Authorized but Unissued Bonds	1,500	1,500									3,000
Total Funding	1,500	1,500	1,905	155	4,920	4,855	4,570	11,930	10,640	7,480	49,455
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design FY 2025 - FY 2029
- Construction FY 2027 - FY 2032

Project Links:

- Lubber Run Stormwater project page:
<https://environment.arlingtonva.us/stormwater-capacity-improvements/lubber-run-stormwater-improvements/>

Changes from Prior CIP:

The size, scope, and timing of this project has increased from the prior CIP.



11. MISCELLANEOUS EXPANSION/ CAPACITY PROJECTS

Project Highlights:

- This program is for the design and construction of new storm drainage system assets where none currently exist.
- This program is for the design and construction of pipe extensions needed to address localized drainage problems.
- The goal is increased capacity of the secondary or tertiary storm drainage system where data, surveys, and capacity studies identify insufficiency or under-development of the system.
- This program is not intended to provide watershed scale drainage improvements.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

VARIOUS

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue				310		320		325		335	1,290
Stormwater Utility Fee Revenue		300									300
Previous Funding											
Total Funding	0	300	0	310	0	320	0	325	0	335	1,590
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0



12. NORTH THOMAS STREET

Project Highlights:

- Project will increase capacity of the storm drain system along North Thomas Street to mitigate flooding during severe storms.
- Project includes installation of approximately 700 linear feet of 60-inch diameter storm sewer and upgrades to several inlets into the system.
- Existing stormwater infrastructure has needed several repairs due to deteriorating condition.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Donaldson Run

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue			850	1,060							1,910
Stormwater Utility Fee Revenue	150										150
Previous Funding											
Authorized but Unissued Bonds		255									255
Total Funding	150	255	850	1,060	0	0	0	0	0	0	2,315
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design FY 2023 - FY 2024
- Construction FY 2025 - FY 2026

Changes from Prior CIP:

Project schedule and costs have been updated for refined scope.



13. SPOUT RUN WATERSHED CAPACITY IMPROVEMENTS

Project Highlights:

- Watershed scale project to increase capacity of storm sewers and provide overland relief pathways to mitigate impacts of flooding (identified for Critical Vulnerability).
- Current focus is on providing an overland relief flow path for larger storm events.
- Land acquisition is required.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Cherrydale
Waverly Hills

Funding Notes:

New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue			8,485	8,395	8,640	8,640	7,000	6,005	6,175	5,055	58,395
Previous Funding											
Authorized but Unissued Bonds	5,150	13,445									18,595
Total Funding	5,150	13,445	8,485	8,395	8,640	8,640	7,000	6,005	6,175	5,055	76,990
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Non-Personnel (\$)		50	75	100	125	150	175	200	225	250	1,350
Total Impact	0	50	75	100	125	150	175	200	225	250	1,350

Critical Milestones:

- Design FY 2022 - FY 2032
- Construction FY 2024 - FY 2032

Project Links:

- Spout Run Stormwater Project Page: <https://environment.arlingtonva.us/stormwater-capacity-improvements/spout-run-stormwater-improvements/>

Changes from Prior CIP:

The size, scope, and timing of this project has increased from the prior CIP.



14. STOHRMAN'S RUN WATERSHED CAPACITY IMPROVEMENTS

Project Highlights:

- Project will increase capacity of the storm drainage system in Stohman's Run watershed along 39th Street North where there is no overland relief.
- Project will reduce potential damage to public and private property due to repeated flooding.
- Easement acquisitions required.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Stafford-Albermarle-Glebe

Funding Notes:

New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue			1,235								1,235
Previous Funding											
Authorized but Unissued Bonds	300	500									800
Total Funding	300	500	1,235	0	0	0	0	0	0	0	2,035
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design FY 2023
- Construction FY 2024 - FY 2025

Changes from Prior CIP:

The size, scope, and timing of this project has increased from the prior CIP.



15. TORREYSON RUN WATERSHED CAPACITY IMPROVEMENTS

Project Highlights:

- Watershed scale project to increase capacity of storm sewers and provide overland relief pathways to mitigate impacts of flooding (identified for Critical Vulnerability).
- Initial project implementation focuses on reducing risk of flooding in Westover area, which experienced severe flooding in 2019.
- Large underground detention facility at Cardinal Elementary School is currently under construction.
- Future improvements include upstream detention facility and pipe upgrades to complete the watershed scale flooding solutions.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Highland Park-Overlee Knoll
Leeway Overlee
Tara-Leeway Heights

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue			2,225	2,515	3,585	3,900					12,225
Previous Funding											
Authorized but Unissued Bonds	340	2,165									2,505
Total Funding	340	2,165	2,225	2,515	3,585	3,900	0	0	0	0	14,730
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Cardinal Elementary School Detention Vaults FY 2021 - FY 2023
- Design FY 2023 - FY 2025
- Construction FY 2024 - FY 2028

Changes from Prior CIP:

The size, scope, and timing of this project has increased from the prior CIP.



16. WILLIAMSBURG AT NORTH UNDERWOOD CAPACITY

Project Highlights:

- Project will reduce the hydraulic grade line in Williamsburg Boulevard and increase capacity of the storm drain system to address area flooding
- Project entails approximately 500 linear feet of 60-inch diameter storm sewer.

Associated Plan(s):

Storm Water Master Plan

Neighborhood(s):

Arlington-East Falls Church

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
New Bond Issue		815	880	1,030							2,725
Previous Funding											
Authorized but Unissued Bonds	150										150
Total Funding	150	815	880	1,030	0	0	0	0	0	0	2,875
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design FY 2023 - FY 2024
- Construction FY 2025 - FY 2026

Changes from Prior CIP:

Project timeline and costs have been updated for refined scope.