



STORMWATER MAINTENANCE
& CONSULTING

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We Protect and Restore Watersheds



A Certified Disadvantaged
Women-Owned Business

Formerly Stormwater Maintenance & Consulting, SMC is a design, construction, and maintenance firm focused on stormwater, stream restoration, and drainage systems.

SMC's engineering group provides design, consulting, and inspection services. The construction division performs construction, repair, and maintenance of all types of manmade stormwater and natural stream and wetland systems. SMC is an industry leader in the practice of engineering, maintaining, repairing, restoring, and retrofitting existing infrastructure.

Our in-house expertise begins with seasoned design knowledge and extends to construction, inspection, maintenance, and life cycle repairs. This diversification of services gives our clients unusual expertise and extraordinary value. Very few firms have the technical knowledge and experience in design, construction, and maintenance with in-house resources.



We work with all types of stormwater infrastructure including natural streams, man made drainage systems, high-hazard dams, large traditional facilities, underground structures, and contemporary LID micro-scale and vegetative-based techniques.

With locations in the Baltimore and the Nation's Capital areas, our core markets are in Northern Virginia, Maryland, Delaware, the District of Columbia, and Central/Southeastern Pennsylvania. For multi-site clients, we can provide services from Virginia to Connecticut.

SMC is a Women Owned Business Enterprises (DBE/WBE) in numerous municipalities. We welcome the opportunity to be a subconsultant or subcontractor on projects with DBE requirements.

- Maryland Department of Transportation (MDOT) SWM: 12-334
- District of Columbia 16-09-21-N
- Virginia SwAM and DBE (SWM): 701301
- Women's Business Enterprise National Council (WBENC) SWM: 2005122077
- City of Baltimore SWM: 12-358323
- City of Philadelphia SWM: 108
- Prince George's County, MD SWM: 14-9768 County Located Business: CLBC-16-033

Overview

What we do:

- Water Resources Engineering
- Local, State, & Federal Permitting
- Industrial & MS4 Restoration Design
- Stream Restoration Design
- Inspection
- Surveying
- Structural Engineering
- NPDES Permitting
- Cost Estimating
- Construction of stormwater retrofits
- Stream Restoration Construction
- Routine Maintenance
- Non-Routine Maintenance
- Major Repair Construction
- Vac Truck Services

All of the above are performed with in-house resources.

SMC consistently attracts highly qualified personnel because of our passion for stormwater, singular focus, and notable reputation in the stormwater design and construction communities.

We retain these talented professionals with an inclusive culture of mutual respect, enthusiastic professional integrity, client-focused performance, and capital reinvestment.



Since 2002, SMC has built a reputation for providing cost effective and well informed services with a focus on protecting the interests of our clients. Our intense effort for client satisfaction has resulted in many word-of-mouth referrals and organic growth throughout the Mid-Atlantic. Our best marketers are our existing clients.

What they are saying:

"...in regards to working through this with your team – both you and Ted were great to work with and your wealth of experience was instrumental in getting this resolved as cost efficiently as possible. Your crew did a very good job with the needed work as well. We will certainly call for any future work."

Walter O.
Business Center at Owings Mills

"Thank you for the report. We are very please with your professional approach to this work and are quite satisfied. Our local manager was very happy with the communication from the crew throughout the project."

Chuck A.
Grainger, Inc.

"I was just telling our residents what a pleasure it was to work with such a credible entity!!! You made the project 'painless' for us!!"

Barbara F.
Stevenson Crossing HOA



Our clients:

- Municipalities
- Land Owners
- Property Managers
- Property Owners
- Homeowners Associations
- Non-profit Organizations
- Engineering Firms
- Environmental Consultants
- Landscape Contractors
- General Contractors
- Environmental Contractors

Client Focused

References:

Ms. Amy Stevens
Montgomery County

Department of Environmental Protection
240.777.7766 amy.stevens@montgomerycountymd.gov
SMC provides technical inspection for more than 9,000 stormwater practices in support of the County's Inspection Program. Work includes confined space entry inspection of several thousand underground facilities.

Ms. Karlee H. Copeland
Fairfax County Maintenance & SWM Division

703-877-2859 Karlee.Copeland@fairfaxcounty.gov
SMC provides ongoing routine and non-routine maintenance services for Fairfax County on approximately 1000 stormwater facilities via a multi-year contract vehicle. Work includes mowing, trash pick-up, sediment cleanout, clearing, underground inspection and maintenance, etc.

Mr. Robert Plummer
The Columbia Association

443.277.4296 rob.plummer@columbiaaassociation.org
SMC has completed several projects for CA, including: construction of a bioretention facility and a bioswale water quality retrofit and the design of a repair/retrofit of a wet pond.

Mr. Ted Brown
Biohabitats, Inc.

410.554.0156 tbrown@biohabitats.com
SMC has been a subconsultant and team member on numerous projects with Biohabitats including MS4 Watershed Assessments and USACOE ESD training.

Mr. William A. McFaul
St. John Properties, Inc.

(410) 788-0100 bmcfaul@sjpi.com
SMC provides inspection, maintenance, and repairs portfolio-wide on approximately 41 sites throughout Maryland.

Mr. James Abromitis
The Homeowners of Greenspring, LTD.

410.504.4215 jabromitis1@gmail.com
SMC provided a design/build repair, retrofit, and on-going maintenance of an in-stream stormwater detention pond.

Mr. Robert Copper
Florida Rock Properties, Inc.

410.771.4100 RobertC@FRPDev.com
Stormwater Maintenance, LLC provides annual inspections, maintenance and repairs to multiple locations throughout Maryland.

Other references available upon request.

Engineering

What we do:

- Water Resources Engineering
 - Hydrology
 - Hydraulics
 - Floodplain and Drainage Analysis
- Stream Restoration Design
 - Outfall Stabilization & RSC Design
- Stormwater Facility Design
 - Feasibility Analysis
 - Assessment & Concept Design
 - Final Engineering
 - Industrial & MS4 Restoration Design
- Local, State, & Federal Permitting
 - Plan Approvals
 - Grading/Building Permits
 - NPDES Industrial Permits
- Consulting
 - Drainage Issue Assessment
 - Expert Witness Testimony
 - SW Utility Fee Credits
 - Industrial NPDES & SWPPPs
 - High Hazard Dam Services
- Existing Infrastructure Improvements
 - Stormwater Retrofit Design
 - Major Repair Design
- Surveying
 - Topography
 - Construction Stakeout
 - As-builts
- Structural Engineering
 - Retaining Walls
 - Structural Repair Design
 - Bridge Analysis and Design

The foundation of our engineering practice was established 30 years ago with an intense fascination of applying the technical aspects of water resources engineering to practical applications. This interest has evolved into an organization that offers daily exposure of our technical staff to the real world of construction and operations and maintenance. While this informs our work product in unique ways, it also brings engineering to life, engaging our staff on exciting projects and attracting new talent.

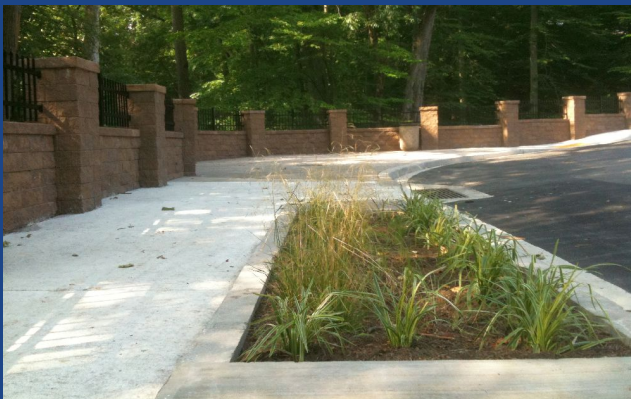


Even though SMC practices construction and maintenance, engineering is at the heart of our organization and informs everything we do. Ingrained in our culture is a high priority on weighing the technical and practical aspects of problems. This prioritization results in solution-based approaches and avoids turning every project into a monumental engineering feat. We focus on getting things done efficiently with an eye on project completion.

As existing infrastructure specialists, we meet the challenges of engineering improvements to highly constrained infrastructure. This specialization has established us as a go-to firm for resolution of issues with existing stormwater facilities, assessing and designing retrofit facilities, and natural stream restoration design. To meet these challenges, our engineers combine high levels of creativity with common sense and technical expertise.

Where our engineers are licensed:

- Maryland
- Virginia
- Delaware
- Pennsylvania
- Connecticut
- New York
- New Jersey
- District of Columbia
- Georgia
- Texas



Surveys

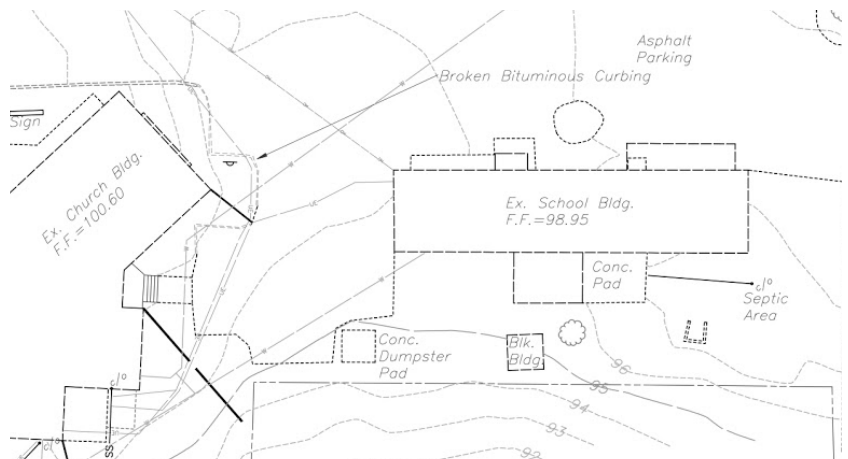
Survey Services:

- Design Phase Services
 - Topographic Surveys
 - Bathymetric Surveys
 - Floodplain Sections
 - Global Positioning Surveys (GPS)
 - Property Boundary Surveys
 - Easements Plats
 - Right-of-Way Plats
 - Record Plats
 - Property & Deed Descriptions
 - Wetland Mapping
 - Forest Resource Mapping
- Construction Phase Services
 - Stormwater Facility Stakeout
 - Stream Restoration Stakeout
 - Roadways Stakeout
 - Utility Stakeout
 - Building Stakeout
 - Structure Stakeout
 - In-process Verification Surveys
 - As-built Surveys
- Post-construction Phase Services
 - As-Built Certifications
 - ALTA/ACSM Surveys
 - House Location Surveys
 - Flood Elevation Certificates
 - Condominium Conversion Surveys
- Drone Services
 - 3D Modeling
 - Aerial Photography & Video
 - Jobsite Documentation
- DBE/WBE Certified MDOT, VA, DC, WSSC, Baltimore City, City of Philadelphia, WBENC

SMC Surveys provides a wide range of surveying services throughout Maryland for land owners, SMC projects, and on design and construction teams as a certified DBE/WBE. With in-house engineering and construction operations, our survey professionals have an intimate understanding of the importance of timely response and accurate survey data. Our internal feedback loop with in-house design and construction personnel ensures that our surveyors have broad knowledge that matches our clients' needs.



SMC's survey resources includes surveying professionals with nearly 30 years of focused experience, state-of-the-art equipment including robotic Total Stations and GPS, and industry-standard software including AutoCAD, Carlson Survey, ArcGIS, and Civil 3D.



In business since 2002, the roots of SMC are in the fast-paced land development engineering community. This background, combined with a passion for excellence and environmental sustainability has attracted committed professionals highly qualified in their individual disciplines. With an internal culture of being a prime consultant, our clients find that we excel as a DBE firm with impeccable service geared toward ultimate customer satisfaction. This culture, coupled with a deep understanding of both design and construction, sets us apart as a go-to DBE/WBE firm for survey services.

Inspection

What we do:

- Inspection of Stormwater Facilities
 - Regulatory - Assisting municipalities with MS4 and State compliance with Triennial inspections
 - Private facilities - Protecting the interests of landowners and property managers with owner representation
 - Due diligence - Facilitating informed property transactions
- Specialized Inspection
 - CCTV - of storm drains & sewers
 - Confined space entry - Multiple highly experienced fully equipped OSHA compliant inspection teams
 - High hazard dams - Engineer in Charge of numerous high hazard dams to meet regulatory compliance
 - Conditional assessments - On-site inspections by engineers to determine condition and remedial measures
 - Drainage issue inspections - Inspection, analysis, and remediation design of flooding problems
 - Stream and wetland systems for stability and geomorphic analysis
 - MS4 & TMDL stream monitoring
 - Illicit Discharge Detection & Elimination - Identification, reporting, investigation, and source location of non-stormwater discharges
- MS4 Restoration Assessments
 - Field identification of restoration and retrofit sites
 - Feasibility of restoration opportunities



For over 15 years, the SMC team has established a significant post-construction stormwater inspection practice. Our inspection teams are responsible for the ongoing inspection of thousands of facilities throughout the Mid-Atlantic. We work for the leading MS4 jurisdictions in a wide variety of inspection roles to facilitate their ongoing compliance and to address the challenges of MS4 restoration requirements. Leading commercial property owners and managers look to us to inspect and advise them on infrastructure management.



Using professional judgement to avoid the “too much information” pattern, SMC has developed extremely efficient inspection methodologies that are individualized for specific clients. Our work focuses on delivering information that is clear, concise, and understandable for the end-user. We know that in many cases, less is definitely more.

Firm believers in an open-source approach, we have been honored to train others and continue to lead trends in inspection techniques with a singular goal of increasing the value of the results for our clients. To this end, we utilize 100% digital field data and have developed smart phone apps that maximize efficiency and have been used by hundreds of other practitioners.

What we inspect:

- Detention (dry) ponds
- Retention (wet) ponds
- Underground stormwater structures
- Bioretention and rain gardens
- Low impact development practices
- Environmental site design practices
- Lakes
- High hazard dams
- Stormdrain systems
- Inlets, catch basins, manholes, culverts
- Streams & wetlands
- NPDES erosion & sediment control practices

Construction

The ultimate purpose of engineering is to build stuff. So it's no surprise that, after many years of engineering stormwater infrastructure, we brought together a talented team of construction professionals to build it. By applying core principles of engineering practice and ethics to construction, we approach construction in a unique way that ensures the highest level of value to our client. Our sole focus on stormwater and the diverse skillset of our staff combine to establish us as the go-to firm for reliable and cost effective stormwater construction.

The roots of our construction practice started by being a sole-source prime contractor, often in a design/build role. This resulted in gaining a reputation as a firm that can get things done efficiently in highly constrained and challenging situations. This translates well being a DBE/WBE subcontractor, as prime contractors know we are responsive and have the capabilities to play a key role on larger projects.



As existing infrastructure specialists, our niche is in retrofits, improvements to existing features, major repairs, and challenging restoration projects. New practices, including Low Impact Development (LID) and Environmental Site Design (ESD) are our speciality.

Our firsthand knowledge or the engineering behind every design ensures a high quality construction product.

What we build:

- Bioretention
- Sand filters
- Rain gardens
- Dry swales
- Infiltration practices
- Riser/barrel replacements
- Riser/barrel lining
- Earthen embankments
- Toe drains
- Detention ponds
- Retention ponds
- Proprietary devices
- Permeable paving
- Culverts
- Stormdrains
- Channel improvements
- Natural stream restoration
- Pavement drainage
- Curb/paving
- Inlet/catch basin repairs
- Tree box filters
- Erosion Control
- Major erosion repairs
- Environmental landscaping

Maintenance

Maintenance is our middle name! We were one of the first in the stormwater industry to identify the importance of operations and maintenance (O&M). This led to the development of customized maintenance programs that integrated inspections to ensure that facility managers do not spend more on maintenance than is needed. With over ten years experience performing maintenance, our experience results in maximized value to our clients.



As an industry-leading maintenance firm, we have assisted in the development and implementation of maintenance programs for numerous client types including some of the largest and most progressive MS4 municipalities, multi-site retail property owners, industrial operators, and property management professionals.

We have the specialized equipment and experienced personnel to maintain any type of stormwater infrastructure ranging from traditional above- and below-ground facilities to contemporary Low Impact Development and Environmental Site Design micro-scale practices.

Our goal is to reduce maintenance costs while building trusting long-term relationships with our clients. Consistent with applying engineering ethics to all of our work, this is accomplished with a culture of comprehensive knowledge, attention to detail, and enthusiastic client representation.

What we maintain:

Above ground:

- Detention (dry) ponds
- Retention (wet) ponds
- Bioretention
- Sand filters
- Rain gardens
- Dry swales
- Infiltration practices
- Permeable paving
- Tree box filters
- Created wetlands
- Green roofs

Below ground:

- Detention vaults
- Sand filters
- Oil/grit separators
- Stormfilters
- Stormceptors
- Vortex
- Jellyfish
- Stormtech
- Culverts
- Stormdrains
- Inlet/catch basins



Pipeline Services

Pipeline Cleaning & Inspection Services:

- Stormwater CCTV Infrastructure Inspection
 - Embankment outfall assessment
 - Remediation alternatives analysis
 - Pipeline remediation design
 - Engineering reviews & permitting
 - Remediation construction
- Pipeline cleaning
 - Stand-alone jetting
 - Jetting/vac combination
 - Integrated inspection & cleaning
 - Underground Structure Cleanouts
- Dedicated Equipment
 - Combination vac trucks
 - Latest CCTV equipment
 - Construction equipment support
- Personnel
 - NASSCO PACP, MACP, LACP certified
 - Thousands of hours of vac experience
 - Backup personnel adds redundancy
- Full in-house support as needed
 - Professional engineering
 - Surveying
 - Redundant staffing capacity
 - Full construction support
- DBE/WBE Certified MDOT, VA, DC, WSSC, Baltimore City, City of Philadelphia, WBENC

Working with pipeline infrastructure is at the core of what we do at SMC. With in-house engineering, maintenance, and construction capabilities, we understand the details of pipeline systems, how they are designed and constructed, problems that age and use may cause, and remediation techniques; all of which informs our understanding of the importance of accurate cleaning, inspection, and assessment techniques.



Our pipeline cleaning and inspection service unit was created as an offshoot of our long-term vac truck and stormwater inspection services. Having jetted and inspected miles of stormwater systems, a natural evolution has been to perform similar services on other pipelines including wastewater systems.



The SMC Pipeline Services group is equipped with state-of-the-art and redundant Cues camera hardware and Granite NAASCO PACP compatible software running on on-board computers, all with 4 wheel drive capabilities.

As existing infrastructure specialists, we are used to meeting the challenges of highly constrained infrastructure. Our experience includes unique pipeline assignments, from short stormwater barrels through entire municipal system inspections staged over several years. With a client-focused culture we customize cleaning and inspection programs to fit the needs of each client.

