

Statement of Qualifications



Statement of Qualifications

Prepared for Lower Makefield Township

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Remington & Vernick Engineers (RVE) is one of the oldest established consulting firms in the country and has successfully completed thousands of planning, engineering and capital infrastructure improvement projects. We represent diverse clients throughout the Mid-Atlantic. Our professional staff includes experts in the major areas of engineering required to support capital facilities and infrastructure improvements, land use planning and redevelopment, tax map maintenance, GIS database, environmental support services, resident engineering, construction inspection, owner's representation, program management, technical and administrative support services. We continue evolving to meet and respond to the challenges of technology, the marketplace and our clients while maintaining our focus on quality and service.

Corporate Management

RVE, a Subchapter S Corporation, was incorporated in New Jersey on April 23, 1951. The firm has changed names several times since its 1901 founding by J.C. Remington and has operated under its present name since 1984. From 2003 to 2017, the firm's regional offices operated as affiliate firms: Remington, Vernick & Beach; Remington, Vernick & Arango; Remington, Vernick & Vena; and Remington, Vernick & Walberg Engineers. In 2018, these affiliates were consolidated under Remington & Vernick Engineers II, Inc. and now do business as RVE.

Craig Remington, PLS, PP—grandson of J.C. Remington—and Edward Vernick PE, CME led the firm as Vice President and President/CEO, respectively, for several decades until 2020 when they assumed roles as Vice Chairman and Chairman. Leonard A. Faiola, PE, PP, CME now leads the firm as President/CEO and Annina Hogan, PE, RA, CME, LEED-AP serves as Executive Vice President/COO. Edward Vernick remains a senior advisor to the RVE management team.

Executive Management					
Name	Title	Years' experience		Office(s)	
		RVE	Total		
Leonard A. Faiola, PE, PP, CME	President/CEO	27	29	Cherry Hill, NJ	
Edward Vernick, PE, CME	Chairman/Senior Advisor	41	51	Cherry Hill, NJ	
Craig F. Remington, PLS, PP	Vice Chairman	48	48	Cherry Hill, NJ	
Annina Hogan, PE, RA, CME, LEED-AP	Executive Vice President/COO	21	23	Cherry Hill, NJ	
Edward F. Brennan, Esq	General Counsel/Corp. Sec.	5	20	Cherry Hill, NJ	
Principals					
Richard G. Arango, PE, CME	Executive Vice President	26	42	Secaucus, NJ	
Thomas F. Beach, PE, CME	Executive Vice President	34	41	Conshohocken, PA	
K. Wendell Bibbs, PE, CME	Executive Vice President	30	30	Cherry Hill, NJ	
Stephanie Cuthbert, PE, CME	Water/Wastewater Department Manager	27	27	Cherry Hill, NJ	
Edward Dennis, Jr., PE, PP, CME	Regional Manager	20	20	Pleasantville and Wildwood, NJ	
Alan Dittenhofer, PE, PP, CME	Executive Vice President	33	33	Toms River, NJ	
Christopher Fazio, PE, CME	Executive Vice President	25	25	Conshohocken and Bucks County, PA Newark, DE Laurel, MD	
Michael G. Meyer, PE	Regional Manager	33	38	Pittsburgh, PA	
John M. Pyne, PE, CME	Executive Vice President Corp Development Director	9	25	Cherry Hill, NJ	
Christopher Saponaro, PE, PP	MEP Department Manager	22	30	Cherry Hill, NJ	
Terence Vogt, PE, PP, CME	Executive Vice President	35	37	Old Bridge, NJ	
Dennis K. Yoder, PE, CME, LEED-AP	Executive Vice President Director of Engineering	31	41	Cherry Hill, NJ	

Office Locations

The firm's Pennsylvania operations are supported by our offices in Bucks County, Conshohocken, and two locations in Pittsburgh, PA. RVE's headquarters are in Cherry Hill, NJ and we operate 6 additional New Jersey offices in Haddonfield, Old Bridge, Pleasantville, Secaucus, Toms River and Wildwood. We also have offices in Laurel, MD and Newark, DE. The full resources of the firm can be made available, if necessary, in support of each project we manage.

Municipal Representation and Management

RVE's appointments include Engineer and Planner to municipalities and its Commissions and Boards. Communities rely on RVE to act in a partnership to provide reliable cost-efficient, cost-effective services. We provide each municipality with a dedicated professional who offers personalized service and provides access to our comprehensive planning, engineering, landscape architecture and construction management expertise.

Below is an overview of the key personnel proposed to support the Township in the technical disciplines required. We support municipalities through a project's lifecycle—from capital budget development, through design, construction, and project final close-out. We routinely conduct public meetings, prepare grant applications, coordinate with outside agencies and resolve contract disputes. Our clients ultimately have access to the expertise of more than 400 professionals, who work as one project team to best serve their needs.

**Christopher Fazio, PE, Principal in Charge**

Mr. Fazio has more than 26 years of engineering experience. As Principal in Charge, he is responsible for projects undertaken in Pennsylvania, Delaware, and Maryland. His versatile experience includes providing a full range of professional services including managing utility and civil engineering projects. Mr. Fazio's specific areas of expertise include sanitary and storm sewer design, hydraulics and hydrology, sewerage, and water systems.

**Andrew Pockl, PE, CFM, Project Manager/Engineer**

Mr. Pockl has more than two decades of experience in municipal engineering, land development and capital improvement projects. Mr. Pockl has managed numerous of municipal projects throughout Bucks County and is responsible for delivering project assignments on schedule and within budget.

**Elizabeth C. Colletti, PE, Engineer**

has nearly a decade of experience in civil engineering, city planning, land use design and environmental planning. Ms. Colletti's software skills include Solid Works, MATLAB, Hydro-CAD, STELLA and ArcGIS. Ms. Colletti is responsible for the planning and design of sanitary, storm sewer and water mains, managing environmental impacts and permitting. Ms. Colletti has been directly responsible for bringing the MS4 Program for various municipalities in into compliance.

**Joseph M. Petrongolo, RLA, Director of Planning & Landscape Architecture**

Mr. Petrongolo has more than three decades of experience providing municipal planning, conceptual design, project management, construction documentation, and site design services. Mr. Petrongolo's experience includes recreation site design, single and multi-family residential development, commercial site plan layout, municipal ordinance revisions and preparation, master plan preparation and amendment, development review and redevelopment planning.

**Karen Twisler, RLA, LEED AP BD+C, CPRP, Senior Landscape Architect**

Ms. Twisler has more than 15 years of experience in municipal planning and landscape architecture. Ms. Twisler is responsible for providing conceptual design, project management, construction documentation, and municipal planning. Ms. Twisler's experience, knowledge and skills cover the consultation, planning and design stages in development and redevelopment.

Ability to Provide Services

Key proposed personnel will be available to the client when their particular skills and experience are needed. RVE will review project schedules for feasibility, duration, milestones and interfaces. Schedule development and maintenance services are provided utilizing Microsoft and Deltek scheduling software. These programs enable the critical path of a specified project to be tracked and potential delays to be monitored. Change orders and the impact associated with each delay are also analyzed to ensure the project is proceeding according to schedule.

Corporate Staff

RVE continues evolving to meet the challenges of technology, the marketplace and our clients. What has not changed is our focus on service. Our staff delivers attentive, responsive, professional services and applies their knowledge, creativity and commitment to meet the varied and complex needs of our municipal clients. Today we employ more than 400 professionals specializing in all major facets of municipal consulting. Below is an overview of the staff available to support your engineering needs as municipal consultant.

Corporate Staff Summary table with columns for Facilities Engineering Staff, Environmental Engineering Staff, Administrative Staff, Civil/Site Engineering Staff, Construction Management Staff, and Additional Staff.

Resumes of Key Personnel

Resumes detailing the education, professional credentials and recent experience are provided in the following.

Municipal Support Service Capabilities

RVE provides professional design, planning and construction services for infrastructure capital improvements; environmental remediation; utilities collection and distribution; treatment design; public facility additions and renovations; park and recreation improvements; redevelopment and master planning projects. Our experience is applicable to urban and rural communities with an emphasis on understanding each community's individual goals and vision. Below is an overview of our municipal support services.

Innovative Ideas/Forward Thinking Engineering

RVE remains in the forefront of new ideas and technologies to advance the communities we serve. Innovations can include technological advancements, using of state-of-the-art materials, promotion of new, improved methodologies, and unconventional thinking to increase the value of the projects we design. Since our founding in 1901, RVE has employed innovation in our projects.

RVE is committed to providing our clients with the most updated technology available. We offer time-lapse cameras to document project progress as relevant. Our clients use time-lapse photography images in numerous ways: for operations analysis and improvement, public relations, community outreach and dispute resolution.

RVE uses drone footage taken by a licensed drone operator on staff. This footage provides a fast, cost-effective solution to document infrastructure assets. Our drone equipment takes high-resolution, geo-tagged images and videos of our clients' projects and assets. Drone footage is useful when photographing bridges, water towers and other structures that are difficult to access with a photographer and traditional camera. Drone images can be directly saved into a municipality's Geographic Information System (GIS) for immediate recall and reference, enhancing the municipalities' ability to accurately plan future capital infrastructure investment. Drone footage is also used to document project progress.

RVE employs rapidly evolving 3D printing technology as an additional tool to help envision a new project. These printers allow us to take traditional CAD and other 2-dimensional designs to create prototypes, models and products out of materials such as plastics. These 3D models serve several purposes. They are used by our team to complete the design by avoiding spatial conflicts during construction. Creating 3D model "prints" of projects allows us to show our clients and communities the resulting product before design is complete, increasing the likelihood of project acceptance. 3D prints can also serve as a distinctive "as built" of the final structure or project.

Drone Technology

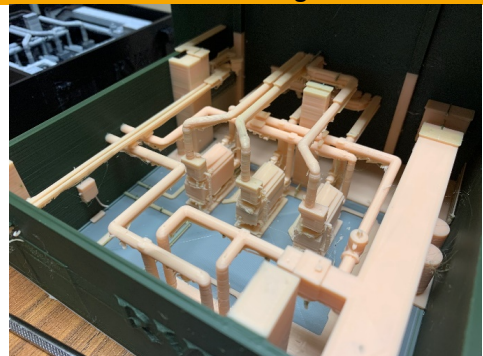


*East Hancock Street Rehabilitation,
Lansdale Borough, PA*



*Whites Road Park Streambank Stabilization,
Lansdale Borough, PA*

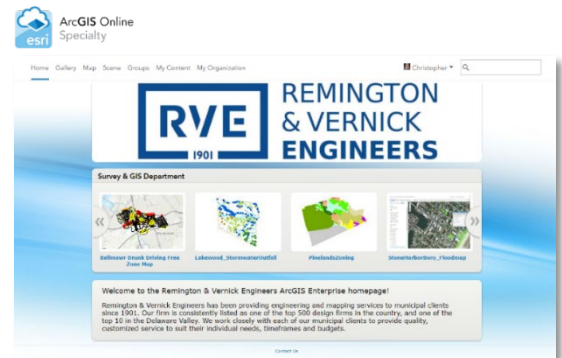
3D Printing



CAD/GIS Services

RVE's professionals also use the latest digital drafting and design tools available, including but not limited to AutoCAD, Esri's ArcGIS and Bentley's MicroStation software. Our professionals generate 3D perspectives and graphics using Autodesk's AutoCAD 3D Max and Civil 3D software. RVE also works with clients to provide the accurate GIS technology they demand for precise mapping, information management, work orders and analysis. Our surveying, mapping, engineering, planning and consulting experts work with clients closely to ensure their GIS needs meet expectations and objectives, is completed on time, is accurate within agreed-upon limitations, stays within budget, and remains current.

Our cartography specialists support clients through the preparation of essential plans and drawings for public improvements like roads, utility systems, and municipal mapping. Our Cartography Department provides various support services to local, County and State governments; among them being the production of tax maps, the preparation of official election and ward maps and planning & zoning map layers. RVE utilizes the latest software to convert up-to-date parcel maps into electronic media through the means of scanning, digitizing, and deed/tax map protraction and coordinate geometry, enabling the development of geographically correct base maps. Each engineering and planning project requires the development of detailed drawings and specifications, with no room for error. The Cartography Department has the experience and capabilities to produce quality products in an efficient and cost-effective manner.



GIS Database Hosting and Asset Management Plans - Municipalities depend on RVE's GIS and cartography professionals to prepare essential maps and GIS deliverables that meet or exceed current regulatory requirements. RVE uses the Esri ArcGIS server platform to provide our clients with innovative and accurate GIS map hosting services. ArcGIS Enterprise allows RVE to accurately create maps, analyze data, solve problems and share geospatial data. RVE works with our clients to create solutions that can be deployed on site or in the cloud. We collaborate with our clients to manage and visualize their data and to provide data analysis that uncovers patterns, trends and anomalies.

Our experts can customize GIS Asset Infrastructure Mapping by creating an integrated, user friendly system of digital maps, preventive maintenance scheduling, complaint tracking by address or asset, work orders and other hyperlinked documents. RVE, utilizing these data fields, will create a GIS Infrastructure Asset Management Program that can be tailored to meet client-specific requirements. This program is based upon functions common to all levels of government services and can be expanded to provide an increased level of customization corresponding to a specific department's needs.

Innovative Ideas/Forward-Think Grant Coordination

RVE obtains grants and loans for projects such as community planning, transportation, infrastructure development, municipal facilities, energy efficiency, renewable energy, and parks and recreation. Through our extensive experience, we have developed valuable relationships with funding agencies to ensure our staff is aware of the latest funding program updates. We discuss funding programs with key agency staff members to ensure our clients' projects are provided with the maximum amount of financial assistance available. Since information on funding sources is often difficult to find and understand, RVE developed and maintains a centralized corporate database to track grant and loan programs that may be applicable towards projects in need of funding. The database ensures key information regarding program eligibility, award amounts, matching requirements and application deadlines are readily available.

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Recent Grant Applications

Entity	Date Awarded	Amount	Project	Grant
Upper Gwynedd Township	December 2021	\$90,000	Haines Run Hydrologic and Hydraulic Study	DCNR Park and Conservation Fund
Lansdale Borough	December 2021	\$122,800	Rehabilitation and Further Development of Whites Road Park	DCNR Park and Conservation Fund
East Norriton Township	December 2021	\$250,000	Rehabilitation and Further Development of Stanbridge Street Park	DCNR Park and Conservation Fund
Hatboro Borough	December 2021	\$83,550	Rectangular Rapid Flash Beacons (RRFB) for Existing Crosswalk	Automated Red Light Enforcement (ARLE)
Falls Township	December 2021	\$756,881	Intersection Safety Improvements	Automated Red Light Enforcement (ARLE)
Catasauqua Borough	December 2021	\$42,282	George Taylor House Roof Replacement	Community Development Block Grant (CDBG)
Upper Gwynedd Township	November 2021	\$76,181	Haines Run Hydrologic and Hydraulic Study	Flood Mitigation
Lansdale Borough	November 2021	\$20,217	Stony Creek Park Parking Lot Paving	Greenways Trails & Recreation
East Norriton Township	November 2021	\$1,000,000	Whitehall Road Sidewalk	DCED MultiModal Transportation Fund
Yardley Borough	November 2021	\$573,689	North Main Street Sidewalk – Phase III	DCED MultiModal Transportation Fund
Hatboro Borough	November 2021	\$300,000	York Road Sidewalk Improvements	DCED MultiModal Transportation Fund
Hatboro Borough	October 2021	\$142,748	Jacksonville/Meadowbrook Crossing Improvements	Montgomery County Transportation Program
Greene County	July 2021	\$150,000	Wisecarver Boat Access	PA Fish & Boat Public Access Grant
East Norriton Township	May 2021	\$200,000	Stanbridge Park Facility Improvements	Montco 2040 Implementation
Hatboro Borough	May 2021	\$125,300	Hatboro Station Trail Lighting	Montco 2040 Implementation
Lansdale Borough	May 2021	\$90,080	Whites Road Park Facilities Improvements	Montco 2040 Implementation
Upper Gwynedd Township	May 2021	\$98,704	Illuminated Traffic and Pedestrian Signage	Montco 2040 Implementation
Upper Gwynedd Township	April 2021	\$1,240,000	Reconstruction of the Sumneytown Pike Bridge	PennDOT MultiModal Transportation Fund
Kennedy Township	April 2021	\$382,771	Relocation of Aiken Road	PennDOT MultiModal Transportation Fund
Yardley Borough	April 2021	\$312,147	North Main Street Phase 2	PennDOT MultiModal Transportation Fund
East Norriton Township	April 2021	\$454,437	ADA Curb Ramp	DCED MultiModal Transportation Fund
Lower Makefield Township	April 2021	\$353,000	Woodside Road Bike Path	DCED MultiModal Transportation Fund
Borough of Phoenixville	April 2021	\$250,000	Mowere Road	DCED MultiModal Transportation Fund
Newtown Township	April 2021	\$227,000	Lower Dolington Road Multi-Use Trail Phase 2	DCED MultiModal Transportation Fund
Yardley Borough	April 2021	\$95,000	North Main Street Phase 2	DCED MultiModal Transportation Fund

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Entity	Date Awarded	Amount	Project	Grant
Downingtown Municipal Water Authority	August 2020	\$457,875	Groundwater Well Treatment	PA Facility H2O
Borough of Phoenixville	August 2020	\$650,000	Wastewater Treatment Plant Upgrades	PA H2O
East Norriton Township	August 2020	\$500,000	Pacer Lane Storm Sewer Pipe Replacement	PA Small Water & Sewer
Township of Falls Authority	August 2020	\$400,000	Sanitary Sewer Inflow & Infiltration Reduction	PA Small Water & Sewer
Township of Falls Authority	August 2020	\$215,036	Penn Village Water Main Lining	PA Small Water & Sewer
Yardley Borough	August 2020	\$211,989	North Main Street Sidewalk Drainage - Phase II	PA Small Water & Sewer
Borough of Catasauqua	August 2020	\$425,000	Lehigh Canal Interceptor Rehabilitation	PA Small Water & Sewer
Lansdale Borough	August 2020	\$323,570	Laurel Lane Drainage Improvements	PA Small Water & Sewer
Township of Kennedy	August 2020	\$237,891	Clever Road Culvert	PA Small Water & Sewer
Borough of Hatboro	August 2020	\$200,000	Celano Park Storm Sewer Pipe Replacement	PA Small Water & Sewer
Borough of Hatboro	September 2020	\$250,000	Further Development of Miller Meadow Park	PA Small Water & Sewer
Borough of Hatboro	December 2020	\$74,028	Williams Lane Flashers	ARLE Funding Program
Falls Township	December 2020	\$1,084,720	Adaptive Traffic Signal System	CMAQ Program

Select Case Studies

RVE is committed to providing our clients with forward thinking, budget conscious services throughout the life cycle of every project. Below are a few case studies of our grant coordination success.

Solar Energy Grant, Lansdale Borough, PA

The Borough of Lansdale began an initiative in 2017 to increase its energy efficiency. Through the grant preparation expertise of RVE, the Borough was awarded two solar energy grants by the Pennsylvania Solar Energy Program to operate more efficiently and produce renewable energy. RVE has supported the Borough on a wide range of projects for more than a decade, and prepared and submitted two grant applications for two facilities. The two grants awarded totaled **\$716,041**, including a \$585,603 grant for solar at the Lansdale Utilities Complex and a \$130,438 grant for solar at the Borough Hall.

The Lansdale Utilities Complex involves the installation of a 509 kW ground-mounted array with dual-axis tracking which was interconnected to an existing substation. The complex is comprised of the Borough's sewer treatment plant, electric utility and PJM interconnection substation. The Borough Hall project involves the installation of a 90 kW rooftop-mounted array to be interconnected to the power grid.

The solar arrays for both facilities were designed to minimize installation costs while maximizing solar access and renewable energy generation, they will generate nearly 1 Gigawatt hours of electricity each year. Both systems feature data monitoring services to track their current and historical. The completed projects will generate significant amounts of electricity to lower operating costs, which will ultimately benefit the entire community. RVE provided complete design and bidding for both projects and construction was completed in 2020.

Lansdale is the **only municipality in the entire Commonwealth** to receive such a grant and they were awarded grants for **two facilities**. The solar technology is both innovative and state-of-the-art: the panels move as the sun moves, maximizing their efficiency. We offer this as an example of our **forwarding thinking approach** in terms of both our **grant application preparation** and the **technologies** used to implement this project.

Whites Road Park Streambank Stabilization, Lansdale Borough, PA

Lansdale Borough has been working for several years to develop a long-term plan to remove sediment and erosion in waterways such as the Towamencin Creek which runs through the Whites Road Park. In September of 2019, the Borough received a **\$290,672** grant to support extensive streambank restoration in the park. The funding comes from the State's Commonwealth Financing Authority. The grant helped to remove sediment bars and plant vegetation along the streambanks.

The purpose of the Whites Road Park Streambank Restoration project was to improve stormwater management, water quality, aquatic habitat and material loss at the embankments. The streambanks were a high source of negative impacts to water quality and aquatic habitat due to the sediment. Furthermore, there was significant material loss occurring at the streambanks. Restoring and stabilizing this streambank reduced the municipality's sediment loading and mitigated the loss of the embankment.

The streambanks were in fair to poor condition. The streambanks along the tributary were eroded along several locations. There was evidence of active bank failure with little stabilization from vegetation. There were trees that were undermined as a result of the erosion. The work consisted of, but was not limited to; sediment removal, slope protection, and the stabilization of the streambanks. The sediment bars along the stream were removed. The streambank was stabilized with vegetated coir logs and landscape vegetation. The coir logs consisted of coconut coir fiber and were utilized for erosion control along the waterline to stabilize the streambanks. Vegetative stabilization matting, including plantings, topsoil and seeding was also installed.

The implementation of the project provided two significant enhancements to the Borough. The first is the immediate benefit to the streambank and surrounding area. The second is the contribution to overall stormwater management and the Borough's MS4 plan. The use of streambank stabilization acts as a means to meet MS4 pollutant reduction requirements, allowing the municipality to save money in the future as a result of TMDL reductions already achieved. While there are no grants specifically for MS4 projects, RVE was able to utilize a grant through the Commonwealth Financing Authority to not only correct an environmental issue, but also reduce annual out of pocket expenses required to comply with the mandated MS4 program. We offer this as an example of our **forwarding thinking approach** both in terms of our grant application preparation and the ability to provide long terms savings for our clients.

Woodbine Road Multi-Use Trail, Downingtown, PA



The Borough of Downingtown desired to add safe walking pathways along Woodbine Road, which is a major thoroughfare through the Borough. This is an area of high vehicular traffic due to the presence of several subdivisions and Archbishop Shanahan High School (BSHS). In addition, the area is poorly lit and lacks adequate lighting which also contributes to a lack of safe passage. Due to financial constraints, the Borough was not in a position to fund the project nor pay for any match associated with any grant to pay for the construction improvements. The overall scope of the project included the construction of a 10' wide concrete multi-use trail, serving as a pedestrian and bicycle facility. Two mid-block crosswalks now allow a safe pedestrian crossing from the trail to the existing sidewalk fronting Archbishop Shanahan High School. This project included the construction of a 6' wide concrete sidewalk along a portion of Lincoln Highway to provide for a complete pedestrian connection to existing infrastructure. Street lighting and landscaping would also be proposed as part of this project.

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RVE devised an **innovative strategic plan** to attain the construction funds needed to move the project forward and do so without the need for a match to be provided by the Borough. RVE negotiated and created a partnership between several stakeholders who had vested interests along this corridor: Downingtown Borough, a local developer who had a land development project along the corridor, and the Archdiocese of Philadelphia via the Bishop Shanahan High School. RVE negotiated an agreement that, if we were successful in attaining the grants, both the developer and the Archdiocese would pay for the match on behalf of the Borough. This **innovative and forward-thinking approach** allowed Downingtown to be able to install these improvements at **no cost to the municipality**.

Through the grant writing expertise of RVE, the project was awarded **\$916,600** by the PennDOT TAP grant program and **\$235,000** from the DCED Multimodal Transportation Fund (MTF) grant program. Funding commitments for this grant included \$310,715 from the local developer and \$65,000 from the Archdiocese.

This project featured a partnership between several entities: Downingtown, the developer Eli Kahn and Bishop Shanahan High School. RVE's approach allowed Downingtown to install improvements at no cost to the municipality.

RVE provided the engineering design and bidding support services for the Woodbine Road Multi-Use Trail project. The project consists of a multi-use trail on Woodbine Road, Lincoln Avenue, Business Route 30, and Lancaster Avenue. In addition, sidewalks are proposed along Business Route 30 and Lancaster Avenue. A funding breakdown is provided below:

Grant	Grant Awarded	Developer Match	BSSH Match	Total Project Funding
PennDot TAP Grant	\$916,600	\$225,000	\$50,000	\$1,191,600
DCED MTF Grant	\$235,000	\$85,715	\$15,000	\$335,715

Civil/Site Engineering Services

Stormwater Management - RVE evaluates drainage systems, dams and culverts to provide stormwater management. Our professionals assess the current situation, evaluate the pre and post conditions, identify the design year(s) required of the regulating agency to recommend and then design the most effective system. Included in this effort is the incorporation of Best Management Practices (BMP) to achieve optimum hydraulic efficiencies.

Our expertise covers all aspects of stormwater management including planning, modeling, National Pollution Discharge Elimination System (NPDES) permitting, design, and construction plans and specifications. We work with cities, watershed districts, PADEP, and local authorities to design, implement and maintain budget friendly, resource-efficient solutions that work with the environment. RVE uses innovative best management practices (BMPs) to design rainwater gardens, infiltration basins, stormwater detention basins, bioretention facilities and stormwater wetlands.

SERVICE CAPABILITIES

- Drainage system, dam and culvert inspection and design
- Evaluation of existing structures for safety, stability and hydraulic efficiency
- Preparation and processing of permits for regulatory agency approval
- Open channel flow modeling
- Feasibility studies and engineering analyses
- Stormwater system design
- Watershed analysis
- Hydraulic and Hydrologic studies
- Piping Network analysis
- Retention and Detention Basin designs

Municipal Separate Storm Sewer System (MS4) Services - RVE has successfully managed the MS4 program for a multitude of clients over the last decade. Our firm is intimately familiar with the state statutes and requirements. In addition, we have excellent relationships with the PADEP and have been able to achieve positive results for our clients.

Throughout the reporting period RVE works with the Municipality to accurately capture all necessary documentation needed for the Annual Report utilizing a checklist and ideal schedule for completing all necessary tasks throughout the reporting period. Once the reporting period ends in June, RVE will compile all attachments to submit the Annual Report on behalf of the Municipality in September.

Should a Municipality not have a current permit, or is behind in Annual Reports, RVE is well versed in working with PADEP to develop a plan of action to reach compliance and avoid fines. RVE will complete an initial assessment of the current status of the MS4 program and then determine based on available budget what items can immediately be tackled and then create priorities moving forward. These services include creating updated mapping in GIS, performing field verification for stormwater structures, delineating sewersheds and performing pollutant loading calculations for PRP or TMDL plans, determining a multitude of viable proposed BMPs in a menu format to meet and often exceed the reduction requirements to avoid additional public comment periods, advertising for public comment periods, and submitting to PADEP.

RVE assists Municipalities in long term planning by providing general budget needs and identifying all applicable grant funding to help construct BMPs and maintain the MS4 system.

When it comes to maintaining annual compliance with the 6 Minimum Control Measures (MCMs) our scope of work includes the following elements:

Clients

- Catasauqua Borough
- East Norriton Township
- Hatboro Borough
- Langhorne Manor Borough
- Lower Makefield Township
- Middletown Township
- Newtown Township
- Phoenixville Borough
- Upper Gwynedd Township
- Upper Merion Township
- Warminster Municipal Authority
- Yardley Borough

Service Capabilities

- Public Education & Outreach
- Public Involvement & Participation
- Illicit Discharge Detection & Elimination
- Construction Stormwater Runoff Management
- Post-Construction Stormwater Runoff Management
- Pollution Prevention & Good Housekeeping for Municipal Operations and Maintenance

Parks and Recreation - RVE's parks and recreational facility designers offer comprehensive services in conducting site feasibility studies, preparing conceptual and final design plans, producing contract documents and engineer estimates. We also assist with regulatory compliance, grant application requests, permitting and bidding as required. Our experience includes design and or redesign of open space including sport complexes, natural turf fields, synthetic turf fields, associated sports lighting, water splash parks, nature trails, dog parks, nature parks, passive and active recreation areas and playgrounds.

SERVICE CAPABILITIES

- Facility planning
- Grant coordination
- Landscape design
- Parking design
- Regulatory coordination and permitting
- Recreational and passive park planning
- Site analysis and selection
- Stormwater management

Site Engineering /Land Development - RVE offers a diverse team of professionals to successfully envision, plan, survey and design land development projects. Our team works effectively with clients, architects, contractors, utilities and regulatory agencies to achieve cost-effective designs that achieve project goals and meet regulatory requirements. Our experience at the local, State and Federal levels allows us to efficiently take projects from planning, design, regulatory review approval, construction and Bond Release.

SERVICE CAPABILITIES

- Concept and layout plan development
- Cost estimating
- Development plan submissions
- Environmental assessment
- Infrastructure design
- Landscape design
- Permitting
- Roadway and parking design
- Site analysis and selection
- Site planning
- Stormwater management
- Boundary and topographic Surveying
- Traffic impact assessment

ADA Compliance Surveys/Inspections - RVE performs ADA compliance surveys and inspections to assist public agencies in meeting all requirements of the Americans with Disabilities Act. A staff of professionals specializes in this area of inspection and construction and has provided these services to a variety of clients. Building code specialists perform a thorough inspection and survey of a facility. An inventory list is developed and a report detailing the findings is produced. Once the survey is completed, alternative barrier removal strategies are developed and construction cost estimates are prepared. In many cases, judgments must be made for each individual facility, with consideration to size, type, financial resources of the facility, and the type of code improvements needed. The firm's goal is to identify low cost methods for compliance. For example, in certain cases, an offset hinge may be used to provide the full doorway clearance required by the ADA rather than a full doorway reconstruction. The money saved by low cost alternatives may be used in other more costly areas of barrier removal.

Planning/Landscape Architecture Services

Land Use Planning - RVE has extensive experience providing comprehensive, practical and responsive planning services to local, County and State governments and related and supportive public agencies. Our team of planning experts collaborates with all of our clients to assist in realizing their growth goals including maximizing land use stewardship, preserving the tax base, promoting a safe and healthy sense of community, protecting the environment, efficiently utilizing natural resources and supporting specific projects that contribute to their residents' quality of life.

Redevelopment - RVE is involved in the revitalization of many of Pennsylvania's municipalities and cities. The firm has an extensive portfolio of work in urban design, community development and redevelopment plans throughout the State including the planning of large-scale mixed-use projects. RVE's solutions create a balance between preservation and growth so that municipalities preserve a sense of community and protect natural resources while accommodating necessary development.

Master Planning - RVE has developed master plans for municipalities for all stages of development. In preparing a Master Plan, our professional planners analyzed the environmental and existing land use conditions of a municipality, its regional context, vehicular and pedestrian circulation patterns, recreational and community facilities, and historic and cultural resources. We then research demographic trends and population to anticipate effects on land use and land development activities. We hold a series of public forums to solicit comment from the community and develop goals and objectives for future land preservation, development and redevelopment. The final document is a new plan for development based upon this careful process of research, evaluation and land use scenarios tailored to the specific needs of the municipality.

Landscape Architecture - When RVE serves as the landscape architect to a community, we combine elements of art and science—design, horticulture, environmental psychology and spatial dynamics—to create practical projects that blend with the community. Our professional planners, licensed landscape architects and professional engineers maintain specialization in areas ranging from zoning and land use planning to urban design and transportation planning to ensure the successful design of a wide variety of recreational facilities for communities and public agencies.

Our landscape architecture design team meets with each client to develop a successful project that respects the natural and built environments while meeting the needs of residents and end users. Our projects range from the rehabilitation of small playgrounds and pocket parks to the development of major multi-purpose sports complexes.

Open Space/Recreation/Forestry Management Plans - RVE's staff includes park and open space specialists with experience taking these areas from concept through completion and managing them long term. We identify the opportunities, challenges, funding mechanisms, planning steps, and design, management and maintenance standards specific to sites in urban, suburban and rural settings. Our approach emphasizes community engagement and guidance from policymakers to develop feasible plans adapted to specific community goals. We provide a public involvement and decision-making strategy tailored to each project and setting.

Why RVE?

- We are a full-service engineering firm with the expertise, experience, and dedication to meet the varied challenges that our clients face.
- We will provide the services of over 40 local professionals directly from the surrounding area and have over 400 professionals to draw upon if additional resources or technical expertise are required.
- Our clients receive the personalized service typical of a boutique firm, backed by the multi-disciplined team typically found in larger engineering firms.
- We help our clients learn more about their assets and envision new projects using a variety of innovative technologies such as GIS mapping, drone footage, time lapse photography and 3D printing of conceptual designs.
- We are committed to the municipalities we serve: our employees live and work in the hundreds of communities where we manage projects.
- **Our firm serves only public clients and does not work for private developers: there will be absolutely no conflicts of interest that will hinder our ability to serve you.**

Resumes of Key Staff



REMINGTON
& VERNICK
ENGINEERS

Christopher Fazio, PE

Principal in Charge

Executive Vice President

Overview

- More than two decades of experience in civil/municipal engineering
- Areas of expertise include sanitary and storm sewer design, hydraulics and hydrology, highway and roadway design, subdivisions and site plan design, sewerage and water systems, municipal ordinance/code preparation and technical studies and reports

Work History

RVE experience: 1995 to present

Total experience: 26 years

Education

B.S., Civil Engineering, Lehigh University, 1995

Certifications/Registrations

Professional Engineer – DC, DE, MD, NJ, PA

Certified Municipal Engineer – NJ

OSHA 40 Hours Hazmat Certified

Representative Project Experience

Lower Makefield Township, PA – RVE has served as Township Engineer since 2018. Mr. Fazio served as Principal in Charge for recently completed projects including Pool Complex Repairs, Annual Road Program, Woodside Road Bike Path, Township Railroad Property, Satterthwaite House, Township Pollution Reduction Plan, Janney-Brown House Lead Paint Testing, Dobry Road Reconstruction, and Township Wide Comcast Installation.

Newtown Township, PA – RVE has served as Township Engineer since 2008. Mr. Fazio served as Principal in Charge for recently completed projects including MS4 Consulting Services, Liquid Fuels Road Program, UTS and Pump Island Removal, and Veterans Park Topographic Survey/Erosion Plan.

Yardley Borough, PA – RVE has served as Borough Engineer since 2010. Mr. Fazio served as Principal in Charge for recently completed projects including 155 Windsor Road Drainage Review, MS4 Services, Main Street & Afton Avenue Improvements, ML7 Parking Lot Improvements, Annual Road Program, Crosswalk Installation Program, and North Main Street Sidewalks Phase I.

Middletown Township, PA – RVE has served as Township Engineer since 2006. Mr. Fazio served as Principal in Charge for recently completed projects including Annual Handicap Ramp Program, Annual MS4 Program, Annual Road Paving Program, Community Park Assessment and Improvements, 1222 Lincoln Highway Grading Plan Review, and Township Parks Drainage Projects.

Whites Road Park Streambank Stabilization and Restoration, Lansdale Borough, PA – Principal in Charge responsible for the Whites Road Streambank Stabilization Phases I, II, III and IV. The Borough wished to complete a streambank restoration project within Whites Road Park to address ongoing concerns of streambank erosion, beautify the park, and meet the goals of the Borough's TMDL requirement for Skippack Creek. RVE reviewed the TMDL Plan for Skippack Creek and assess the required pollutant load reduction required to meet the TMDL plan. The analysis included a determination of the drainage areas land cover contributing runoff to the stream, a review of the Borough's outfalls that contribute to the stream, an analysis of areas that could be removed from the drainage area as they do not contribute to the Borough's MS4 system, and a determination of the expected flow to the stream in larger event storms. RVE performed a site assessment of the park and existing streambanks to determine the best measures to be used. RVE provided a presentation and a concept plan exhibit which shows the streambank stabilization measures and proposed landscaping in relationship to the surrounding park for the public to view and comment prior to proceeding with a detailed design at a Borough Public Meeting. Base on comments received from Borough Staff and resident, RVE completed a design of the streambank stabilization and buffer reforestation areas within the park.

Van Landeghem Tract Master Plan, West Norriton Township, PA – Principal in Charge responsible for the Van Landeghem Tract Comprehensive Site Plan in East Norriton and West Norriton Townships. The Townships received a \$29,000 grant from the Pennsylvania Department of Conservation and Natural Resources to produce the master plan. RVE facilitated public outreach, design workshops or other community meetings necessary to achieve strong public support for the project. On-going meetings were held with the Municipal Councils and staff regarding the progress of the project. RVE obtained and reviewed all existing plans, studies, documents and other pertinent information relative to the park, provided a summary of site inventory data based on available reports and field work and prepared a site analysis illustrating the advantages and disadvantages of the site.

Pool Complex Repairs, Lower Makefield Township, PA – Principal in Charge responsible for the evaluation of the Olympic Pool and restrooms at the Pool Complex. We prepared a bid package and completed construction management for the replacement of the existing concrete gutter and repairs to the pool wall. Project was completed five percent under budget.

Andrew Pockl, PE, CFM

Project Manager/Engineer

Overview

- More than two decades of experience in municipal engineering, land development and capital improvement projects

Work History

RVE experience: 2018 to present

Total experience: 22 years

Education

B.S., Civil Engineering, Drexel University, 1997

Certifications/Registrations

Professional Engineer – PA

Certified Floodplain Manager (CFM)

PA Society of Professional Engineers, Member

American Society of Civil Engineers, Member

Representative Project Experience

Pool Complex Repairs, Lower Makefield Township, PA – Client Representative/Project Manager responsible for the evaluation of the Olympic Pool and restrooms at the Pool Complex. Services included bid package preparation for the replacement of the existing concrete gutter and repairs to the pool wall.

2018 Township Road Program, Lower Makefield Township, PA – Client Representative/Project Manager responsible for two road program contracts. RVE obtained a \$300,000 grant to complete a full-depth reclamation of the roadway for Oxford Valley Road. for Contract No. 1. Contract No. 2 involved the milling and overlay of various Township roadways. RVE prepared bid documents and completed construction management for both contracts.

Woodside Road Bike Path, Lower Makefield Township, PA – Client Representative/Project Manager responsible for the development of a concept plan for a 1.2-mile bike path along Woodside Road. RVE completed three grant applications for this project.

Township Railroad Property, Lower Makefield Township, PA - Client Representative/Project Manager responsible for coordinating with various stakeholders and completed a plan and deed description to enable the Township to obtain a conservation easement of approximately 22 acres over a portion of Township property adjacent to the Township Municipal Complex.

Satterthwaite House, Lower Makefield Township, PA – Client Representative/Project Manager responsible for an environmental and structural evaluation of the historic Satterthwaite House at Patterson Farms.

MS4 Report, Lower Makefield Township, PA – Client Representative/Project Manager responsible for the 2018 MS4 permit report as required by PADEP.

Township Pollution Reduction Plan, Lower Makefield Township, PA – Client Representative/Project Manager responsible for working with the PADEP to develop a mapping system of the Township storm sewer system. Once final approval was received, RVE completed a pollution reduction plan to bring the Township in compliance with PADEP regulations.

Janney-Brown House Lead Paint Testing, Lower Makefield Township, PA – Client Representative/Project Manager responsible for lead paint testing and recommended remediation for the historic Janney Brown House.

Dobry Road Reconstruction, Lower Makefield Township, PA – Client Representative/Project Manager responsible for assisting the Township in the negotiation for the reconstruction and roadway widening of Dobry Road. The road was reconstructed by developers completing two separate developments on either side of Dobry Road in exchange for an access easement for a driveway along Oxford Valley Road.

Whites Road Park Streambank Stabilization, Phases I, II, III & IV, Lansdale Borough, PA – Project Engineer responsible for a streambank restoration project within Whites Road Park to address ongoing concerns of streambank erosion, beautify the park and meet the goals of the Borough's Total Maximum Daily Loads (TMDL) requirement for Skippack Creek. An unnamed tributary to Skippack Creek traverses Whites Road Park. Therefore, the area is located within the Skippack Creek watershed. RVE reviewed the TMDL Plan for Skippack Creek and assessed the required pollutant load reduction required to meet the TMDL plan. This included an analysis of the drainage area reaching the unnamed tributary to determine the drainage area's land cover contributing runoff to the stream, a review of the Borough's outfalls that contribute to the stream, an analysis of areas that could be removed from the drainage area as they do not contribute to the Borough's MS4 system and a determination of the expected flow to the stream in larger event storms. RVE provided a concept plan to show the streambank stabilization measures and proposed landscaping in relationship to the surrounding park for the public to view and comment prior to proceeding with a detailed design. Services also included project permitting, bid and award assistance and contract administration.

Elizabeth C. Colletti, PE

Engineer

Overview

- Nearly a decade of experience in civil engineering, city planning, land use design and environmental planning
- Skilled in using Solid Works, MATLAB, Hydro-CAD, STELLA, ArcGIS
- Responsible for the planning and design of sanitary, storm sewer and water mains, managing environmental impacts and permitting

Work History

RVE experience: 2018 to present

Total experience: 9 years

Education

Master of City Planning, Land Use & Environmental Planning, University of Pennsylvania, 2017

B.S., Civil Engineering, University of Vermont, 2011

Certifications/Registrations

Professional Engineer – DE, MD

Representative Project Experience

Municipal Separate Storm Sewer System (MS4) Program Compliance, Various Municipalities, PA - Project Engineer responsible for bringing three municipalities in Bucks County, three in Montgomery County, and one in Lehigh County into compliance with PADEP and through this work has fostered close relationships with regulators. Project scopes consisted of assessing existing compliance with Minimum Control Measures and evaluating if Pollution Control Measures were applicable. If a municipality was out of compliance, back filing of the required Annual Reports was completed and efforts to compile necessary information for the current reporting period began. This work has also included finalizing Pollution Reduction Plans and TMDL Plans. RVE managed the GIS mapping efforts, performed pollutant loading calculations, determined reduction requirements, as well as coordinated necessary field verification and inspections of Best Management Practices/Storm Control Measures to assist clients identify timelines and budget needs to construct required Best Management Practices/Storm Control Measures to meet their reductions within the permit cycle while also identifying all applicable grant opportunities.

Department of Public Works Yard Site Planning, Middletown Township, PA – Project Engineer responsible for supporting the planning of short- and long-term goals for improving the functionality of the Township's proposed yard and the replacement of aged structures. The objective of this project is to measure and survey the yard to create a site plan for a future layout of the property. The site plan includes the facilities outlined to achieve the goals provided by the Public Works Department. With this site plan, RVE will then work with Township staff to finalize a layout for the long-term plan of the site that best suits the Public Works staff and allows them the most effective space to complete their work daily. The site plan also will identify the estimated cost of the proposed work to allow the Township to prioritize funds over the long-term to achieve these goals. The final plan will serve as a comprehensive plan for the Public Works Yard.

Streambank Restoration at Four Locations, Middletown Township, PA – Project Engineer for the Township's Streambank Restoration Project. The project is made up of four streambank locations, which include Clearview Avenue, Woodbine Avenue, Longview Avenue and Woodbourne Avenue. The project began its design and permitting process over the past two years. RVE received and reviewed all the plans and documents that were completed to date. It was the Township's priority to complete the bid documents and construct these restorations. RVE reviewed all transferred information and in our initial assessment we identified that the permitting for each streambank was partially complete. RVE completed the required permitting from the Bucks County Conservation District including receiving approvals. The scope of work included the review of all four streambank locations, preparing and managing the bid process to recommend a contractor, and the construction management and inspection of the work.

Walnut Street Storm Sewer Arch Repair, Pottstown Borough, PA – Project Engineer for the repair of a collapsed segment of storm sewer arch at 42 Walnut Street. In conjunction with assisting the Borough in obtaining grant funding for repairs at 42 Walnut Street, the team considered the use of an aluminum box culvert structure. This new culvert can be fabricated to match the dimensions of the existing storm sewer arch and support backfill and surface loading. The design of the aluminum box culvert included appropriate footers and transitions to existing upstream and downstream segments. The team determined any necessary limitations on future use of the area above the storm sewer, which may include restrictions from building new structures. Upon completion of the project, the area was restored as an off-street parking area. The team provided legal descriptions and exhibits to establish permanent drainage easements or covenants to prohibit future construction over top of the storm sewer arch. In addition, there were some temporary construction easements that were necessary to conduct the project work.

Laurel Lane Sanitary Sewer Rehabilitation, Lansdale Borough, PA – Project Engineer for the sanitary sewer design and drainage improvements at Laurel Lane in Lansdale Borough, Montgomery County. The project includes the rehabilitation of the existing sanitary sewer system, open cut replacement of sanitary sewer service laterals, replacement of manhole frames and lids, adjustment to inlet drainage structure, installation of new drainage structure and stormwater pipes, ADA curb ramp construction, plain cement concrete curb replacement, milling and overlay reconstruction with partial depth reconstruction and all necessary restoration and incidental work.

Joseph M. Petrongolo, RLA

Director of Planning & Landscape Architecture

Senior Associate

Overview

- More than 30 years of experience providing municipal planning, conceptual design, project management, construction documentation, and site design services
- Project experience includes recreation site design, single and multi-family residential development, commercial site plan layout, municipal ordinance revisions and preparation, master plan preparation and amendment, development review and redevelopment planning

Work History

RVE experience: 2000 to present

Total experience: 34 years

Education

B.S., 1987, Environmental Planning and Design/Landscape Architecture, Rutgers University

Certifications/Registrations

Licensed Professional Planner – NJ, MD

Licensed Landscape Architect – NJ
Registered Landscape Architect – PA, DE

Council of Landscape Architectural
Registration Board Certification

American Society of Landscape
Architects, Member

American Planning Association,
Member

NJ Planning Officials, Member

NJ State Board of Professional
Planners, President

Representative Project Experience

City Hall North Apron Replacement, City of Philadelphia Department of Public Property, PA – Planning Manager responsible for the replacement of the concrete North Apron of City Hall. The existing apron has heaved, creating a tripping hazard to pedestrian traffic to City Hall at the north portal. The existing granite treads are not compliant for accessibility. The project requires the replacement of the concrete apron, repair and reset the granite treads, landscaping improvements, a foundation for the temporary steps and ADA compliance for accessibility in the most cost-effective manner, all while using sustainable products during construction.

Pennwood Middle School Campus Renovation, Pennsbury School District, PA – Mr. Petrongolo provided landscape architecture design services for site improvements at the Pennwood Middle School Campus and renovations at Charles Boehm Middle School. The two-story building was built in 1951 and required much-needed renovations. The facility serves grades 6 to 8 for approximately 900 students. Pennwood Middle School is one of three that shares a campus in the District. Renovations included the removal of the Pennwood natatorium (swimming pool wing) to accommodate more classrooms; relocation of the administrative offices to the existing front entrance to provide a more secure situation for people entering and exiting the building; larger guidance suite with conference rooms to facilitate the growing needs of students; maintenance of the exterior brick work, new bus dock pick up and drop off area to improve traffic safety; more visitor parking; new heating system and air conditioning systems. These improvements will address the lack of sufficient space to meet current student and curriculum needs.

Nature Trail Master Plan, Beaver County Conservation District Trail, PA – Mr. Petrongolo provided land architectural services to illustrate the park trail conceptual layout. This plan showed the improvements to the trail where the existing trail was incorporated into the proposed trail and the transitions with the existing and potential bridges. The Master Plan layout also included potential historical marker and trail head locations. As part of the investigation necessary to create the Master Plan, work included the evaluation of the various nature trail materials to determine the most effective type for this application. The site was designed to meet Federal, State, and local requirements. Preliminary plans were reviewed with the Conservation District to ensure the final layout was consistent with the needs for the District.

Canton Community Park Master Plan, Canton Township, PA – Mr. Petrongolo provided planning and landscape architecture services for the preparation of a master plan and preliminary design for the development of a Township Community Park located on West Wylie Avenue. The park encompasses almost 40 acres of undeveloped property previously owned by the Donald York Family Trust.

Barry Bridge Park, City of Chester, PA – Mr. Petrongolo provided planning and landscape architecture support services for the development of conceptual designs for the expansion of Barry Bridge Park. Goals for the project were to provide public access to the industrially developed Delaware River Waterfront and provide a new major public open space resource for residents and visitors to the City.

1600 Park & Hoboken Cove Park Design, City of Hoboken, NJ – Mr. Petrongolo provided planning and landscape architectural services for the new park space at the 1600 Park and Hoboken Cove sites. The project consisted of the construction of a new park on more than four acres of former industrial use property located on the north end of the City of Hoboken. The 1600 Park site is located north of 16th Street between Park Avenue and Willow Avenue. The Hoboken Cove site is located north of the Hudson River Waterfront Walkway that runs immediately north of the Hudson Tea Building and east of Park Avenue along the portion of the Hudson River Waterfront Walkway that is currently under construction by Hudson County.

Karen Twisler, RLA, LEED AP BD+C, CPRP

Senior Landscape Architect

Overview

- More than 15 years of experience in municipal planning and landscape architecture
- Responsibilities include conceptual design, project management, construction documentation, and municipal planning
- Experience, knowledge and skills cover the consultation, planning and design stages in development and redevelopment

Work History

RVE experience: 2003 to present

Total experience: 18 years

Education

B.S., Environmental Planning & Design, Landscape Architecture, Rutgers University, 2003

B.A., English and Journalism, Rutgers University, 1994

Certifications/Registrations

Licensed Landscape Architect – NJ, SC

Registered Landscape Architect – PA, DE, NC

Certified Park and Recreation Professional (CPRP) – National Park and Recreation Association

Certified with the Council of Landscape Architectural Registration Boards (CLARB)

Leadership in Energy and Environmental Design (LEED) Accredited Professional

New Jersey Chapter, American Society of Landscape Architects, Past President

Delaware Valley Green Building Council, Member

Pennsylvania Horticultural Society, Member

Representative Project Experience

City Hall North Apron Replacement, Philadelphia City Department of Public Property, PA – Landscape Architect responsible for the replacement of the concrete North Apron of City Hall. The existing apron has heaved, creating a tripping hazard to pedestrian traffic to City Hall at the north portal. The existing granite treads are not compliant for accessibility. The project requires the replacement of the concrete apron, repair and reset the granite treads, landscaping improvements, a foundation for the temporary steps and ADA compliance for accessibility in the most cost-effective manner, all while using sustainable products during construction.

Pennwood Middle School Campus Renovation, Pennsbury School District, PA – Landscape Architect responsible for site improvements at the Pennwood Middle School Campus and renovations at Charles Boehm Middle School. The two-story building was built in 1951 and required much-needed renovations. The facility serves grades 6 to 8 for approximately 900 students. Pennwood Middle School is one of three that shares a campus in the District. Renovations included the removal of the Pennwood natatorium (swimming pool wing) to accommodate more classrooms, relocation of the administrative offices to the existing front entrance to provide a more secure situation for people entering and exiting the building, larger guidance suite with conference rooms to facilitate the growing needs of students, maintenance of the exterior brick work, new bus dock pick up and drop off area to improve traffic safety, more visitor parking, new heating system and air conditioning systems. These improvements will address the lack of sufficient space to meet current student and curriculum needs.

Nature Trail Master Plan, Beaver County Conservation District Trail, PA – Ms. Twisler provided land architectural services to illustrate the park trail conceptual layout. This plan showed the improvements to the trail where the existing trail was incorporated into the proposed trail and the transitions with the existing and potential bridges. The Master Plan layout included potential historical marker and trail head locations. As part of the investigation necessary to create the Master Plan, work included the evaluation of the various nature trail materials to determine the most effective type for this application. The site was designed to meet Federal, State, and local requirements. Preliminary plans were reviewed with the Conservation District to ensure the final layout was consistent with the needs of the District.

Crozer Park Master Plan, City of Chester, PA – Ms. Twisler provided landscape architectural services for the Crozer Park Master Plan for the City of Chester, PA. Preliminary plans were prepared as part of a Growing Greener Grant Application to the PADEP. Work for the trail rehabilitation included stormwater and trail improvements. Services included develop concept and phasing plans for the implementation of the Master Plan, meet with the City's personnel, local businesses, residents and local community groups to investigate the proposed uses for the park with the end goal being a working document that can be used for the future development of the park and prepare construction cost estimates for the park development implementation by phase.

Whites Road Park Streambank Restoration, Lansdale Borough, PA – Landscape Architect for the project to improve stormwater management, water quality, aquatic habitat, and material loss at the embankments. Presently, the streambanks are a high source of negative impacts to water quality and aquatic habitat due to the sediment. Furthermore, there is significant material loss occurring at the streambanks. Restoring and stabilizing this stream bank will reduce the municipality's sediment loading and mitigate the loss of the embankment. The implementation of the project will provide two significant enhancements to the Borough. The first is the immediate benefit to the streambank and surrounding area. The second is the contribution to overall stormwater management and the Borough's MS4 plan. The use of streambank stabilization will act to reduce MS4 requirements, allowing them to save money in the future because of TMDL reductions.

Municipal Experience



REMINGTON
& VERNICK
ENGINEERS

Carl W. Saldutti, Jr. Skateboard Park

Lansdale Borough, PA

Client:
Lansdale Borough

Project Duration:
February 2019 to December 2020



RVE was retained by Lansdale Borough to provide civil/site engineering design, construction management and inspection services for a new Skate Park at 4th Street Park in the Borough of Lansdale. The Borough was awarded a \$220,000 grant from the Pennsylvania Department of Conservation and Natural Resources (DCNR) in support of this project.

The project included the construction of public plaza-style skateboard park, ADA access, landscaping, project sign and other related site improvements. All contract plans, specifications and documents were prepared in accordance with all applicable requirements of the DCNR. This project faced many challenges when construction was halted due to the COVID-19 pandemic. Additionally, due to the excitement associated with this park, RVE had to take extra safety precautions to keep users out of the park while the concrete cured. Despite these challenges, RVE was able to complete the project close to the original schedule and maintain the project budget.

The scope of work included a topographic outbound survey plan generation, schematic design, preliminary design, permitting, final design and final submission of all appropriate reports, calculations and site plans. RVE held two design phase project coordination meetings with the Borough and one pre-submission meeting with the Montgomery County Conservation District. Services included engineering design, project bidding, contract administration, construction inspection and grant management.

Whites Road Park Streambank Stabilization

Lansdale Borough, PA

Client:
Lansdale Borough

Project Duration:
June 2018 to November 2020



RVE was retained by the Borough of Lansdale to provide permitting, design and construction inspection services for the Whites Road Park Streambank Restoration Project. Whites Road Park is a recreational park located at 400 Whites Road in the Borough of Lansdale. The unnamed tributary 01080 to Towamencin Creek runs through the park and is part of the Perkiomen Creek Watershed and the Delaware River Basin Watershed. The purpose of the Whites Road Park Streambank Restoration project was to improve stormwater management, water quality, aquatic habitat, and material loss at the embankments. In September of 2019, the Borough received a \$290,672 grant which supported the extensive streambank restoration in the park. While there were no current MS4 specific grants available, RVE was able to utilize the Commonwealth Financing Authority grant to not only correct an environmental issue, but also reduce annual out of pocket expenses required to comply with the mandated MS4 program. The grant helped to remove sediment bars and plant vegetation along the streambanks.

This project consisted of the restoration of approximately 1,320 linear feet of the tributary in Whites Road Park. Work for this project included the stabilization of the streambanks, slope protection, sediment removal, removal of trees, removal of deteriorated gabion baskets, and culvert lining replacement. Rock protection was placed at the abutments to reduce the potential for erosion, while the streambanks were stabilized with vegetated coir logs and landscape vegetation. The coir logs consisted of coconut coir fiber and were utilized for erosion control along the waterline to stabilize the streambanks. Vegetative stabilization matting included plantings, topsoil and seeding. The riparian buffer will act as a biofilter and will shade the stream. The shade will control the temperature of the water and therefore allow aquatic life to thrive. Restoring and stabilizing the streambank reduced the Borough's sediment loading and mitigated the loss of the embankments.

During the initial stages of construction, there was opposition from the local community in regard to the removal of trees at part of the site clearing activities. Several of the trees along the embankments had to be removed to regrade the slopes. A considerable number of trees were either dead, undermined or within the re-grading area. Local politician and the community residents shared their concerns with the Borough.

RVE met with Borough personnel on site to provide further clarification of the intent of the project. Once the Borough was able to gain a better understanding of the end result the information was presented to the community at large. The Borough was reassured that additional landscape plantings would be installed on the embankments and within the riparian buffer zones. The project gained positive momentum from the community as the construction proceeded and the project site began to take shape. At the end of the project the Borough received several comments from residents on how beautiful the park looks.

The implementation of this project provided two significant enhancements to the Borough. In addition to the immediate environmental benefits (reduction of sediment loading and mitigating the loss of the embankments) to the streambank, the project also beautified the park and meet the goals of the Borough's TMDL requirement for Skippack Creek. This project also contributes to the overall stormwater management and the Borough's Municipal Separate Storm Sewer System (MS4) plan.

Whites Road Park Playground Improvements

Lansdale Borough, PA

Client:
Lansdale Borough

Project Duration:
March 2020 to May 2021



RVE provided landscape architectural and engineering design services for various improvements to the White Road Park playground near the intersection of Green Street and Rosemont Avenue. The purpose of this project was to amend the existing concept plan for the playground and design a new access road and ADA-accessible parking spaces. RVE also provided construction documents, bidding, and construction management and inspection services

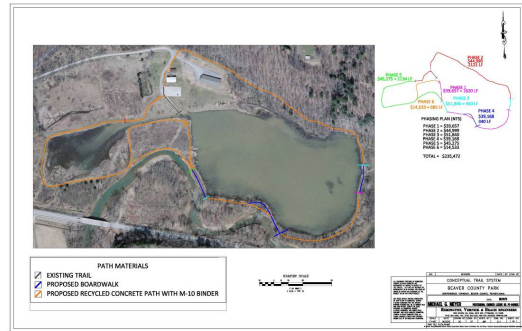
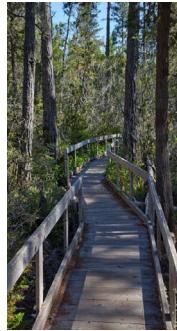
Improvements included a new rain garden complete with underdrain piping and a slow release outlet, installation of an ADA compliant parking lot including a drainage system for stormwater runoff, an 5' wide ADA compliant asphalt walkway from the parking lot to the playground, installation of concrete curbing and underdrain piping for the playground safety surfaces, installation of playground equipment and safety surfaces as per ADA requirements, installation of a new sandbox play area with a boulder wall, installation of a 4' wide ADA compliant walkway around the perimeter of the playground, and landscaping.

Nature Trail Master Plan

Beaver County, PA

Client:
Beaver County
Conservation District Trail

Project Duration:
August 2012 to May 2016



RVE was retained by Beaver County Conservation District to provide civil/site engineering services for the Nature Trail Master Plan.

GIS Topography and Utility Survey – RVE collected GIS data during the Master Planning Phase to be used in creating the base map for the Master Trail Plan layout. This data included parcel data, existing topography and utility information, flood prone areas, potential stream and wetland encroachment areas as well as cultural and archeological areas on the site. Site visits were conducted to document existing site features for incorporation into the plan.

Master Trail Plan – RVE provided a Master Trail Plan to illustrate the park trail conceptual layout. This plan showed the improvements to the trail where the existing trail was incorporated into the proposed trail and the transitions with the existing and potential bridges. The master plan layout also included potential historical marker and trail head locations.

As part of the investigation necessary to create the Master Plan, RVE provided the following:

- Phasing study based on acquired and potential funding disbursements
- Evaluation of the various nature trail materials to determine the most effective type for this application
- ADA accessibility compliance assessment for the trail and bridges
- Investigation of previous environmental impact studies
- Analysis of required permitting based on environmental impacts, including soil and erosion control, stream encroachments, wetland and stream determinations, delineation and mitigation, FEMA floodway and floodplain areas, and cultural resource and archeological investigations

Trail Design Layout and Site Plan – The base map generated as part of the Master Plan was used to illustrate the pedestrian walking trail on the existing lot for the first phase. Included in this package were existing conditions, site layout, grading, utility and construction details. The site was designed to meet Federal, State and local requirements. Preliminary plans were reviewed with the Conservation District to ensure the final layout was consistent with the needs for the District.

City Hall Apron Improvements, Phase II

City of Philadelphia, PA

Client:
City of Philadelphia
Department of Public Property

Project Duration:
October 2016 to May 2020



RVE was retained by the City of Philadelphia, Department of Public Property, to provide professional engineering services for the replacement of the concrete North Apron of City Hall. The existing apron has heaved, creating a tripping hazard to pedestrian traffic to City Hall at the north portal. The existing granite treads are not compliant for accessibility. The project required the replacement of the concrete apron, repair and reset the granite treads, a foundation for the temporary steps and ADA compliance for accessibility in the most cost-effective manner, all while using sustainable products during construction. To achieve ADA accessibility while preserving the history of the building, RVE took the historic granite steps, reset them, and carved in two ADA ramps without affecting the integrity of the granite.

In addition to replacing the concrete apron, a drainage system for the removable bollards was installed during Phase 1 construction to prevent a flooding hazard during rain events and slippery conditions during the winter months. This drainage system ties into the stormwater management system that was roughed in during Phase 1. The stormwater management system was also completed under this phase. Since the concrete North Apron is being replaced, this creates an opportunity to address City Hall's secondary water supply, including a 600-foot, 10-inch corroded water main that runs under the North Apron. All work was completed while maintaining pedestrian and vehicular traffic to limit the project's impact to the public.

The final design of this work met the requirements of the Philadelphia Historical Commission, the Department of Interior, the Philadelphia Water Department, Philadelphia Department of Licenses & Inspections, the Pennsylvania Department of Transportation, and Section 17-11 of the Philadelphia Code.

Dugout Renovations for Serpico Field/Baseball Field Upgrades

West Chester, PA

Client:
West Chester University

Project Duration:
October 2016 to Present



RVE was retained by West Chester University to provide design, engineering and construction management and inspection services for improvements at the South Campus baseball field referred to as Serpico Stadium.

Work for this project includes:

- Demolition of site structures
- Construction of the baseball field dugouts, which will also include installation of benches, storage racks, hooks and shelving, netting, railings, suspended netting and poles safety system at the baseball field bleachers
- Installation of chain link fencing and gates
- Asphalt driveway and parking lot restorations
- Landscaping
- Site grading and topsoil installation
- Installation of infield dirt and warning track material
- Subsurface infiltration bed, ug-a; storm sewer improvements
- 1" copper water service, including installation of yard hydrant; installation of a concrete pad for irrigation system pump
- Erosion and sediment controls
- New electrical services to new dugout, irrigation system, storage building, and field areas

Van Landeghem Tract Comprehensive Plan

West Norriton Township, PA

Client:

West Norriton Township

Project Duration:

December 2016 to May 2018



RVE was retained to prepare the Van Landeghem Tract Comprehensive Site Plan in East Norriton and West Norriton Townships. The Townships received a \$29,000 grant from the Pennsylvania Department of Conservation and Natural Resources (DCNR) to produce the master plan. RVE facilitated public outreach, design workshops or other community meetings necessary to achieve strong public support for the project. On-going meetings were held with the Municipal Councils and staff regarding the progress of the project. RVE obtained and reviewed all existing plans, studies, documents and other pertinent information relative to the park, provided a brief summary of site inventory data based on available reports and field work and prepared a site analysis illustrating the advantages and disadvantages of the site.

RVE worked closely with community leaders, businesses, residents and other stakeholders to identify certain characteristics, qualities and features that make the community unique to be incorporated into the project design. Several alternative conceptual schemes were developed for presentation to the project task force. Based on their review, RVE developed a complete Master Park Plan that is comprehensive in nature and incorporated all facilities. This plan incorporated the Narrative Report, plan recommendations and implementation strategies. RVE planned with the Municipalities' Park maintenance personnel to ensure they have the equipment, personnel and resources to effectively maintain any new improvements installed as part of the project. An annual budget estimate for the cost and revenue items were prepared to accompany RVE's report summarizing the results of previous phases. This was used to develop the final Master Plan for the Van Landeghem site.

All contract plans, specifications and documents were prepared in accordance with all applicable requirements of the DCNR.

Washington Street Mall

City of Cape May, NJ

Client:

Cape May City

Project Duration:

July 2005 to June 2008



RVE prepared a conceptual design plan for the three-block pedestrian mall located at the end of Washington Street in the City of Cape May, NJ. This concept plan was based on our meetings with project stakeholders and required careful consideration of the needs of merchants, tourists and residents. In addition, careful consideration of the community's historic character was included in the design.

The space needed to provide additional seating for the elderly and spaces for outdoor dining without hindering the enormous flow of pedestrian traffic. Only the highest quality materials were selected, including granite curbs, brick sidewalks, bluestone cobble, ornamental pedestrian lighting, and two water features. A conceptual plan was presented to over 150 people and used a three-dimensional, computer-generated fly-through to show how the space will look when completed. Once the concept plan was approved, construction began on revamping the mall.

With the summer months having the highest tourist volume, it was important the project be kept on time and within budget. The Washington Street Mall was completed in June 2008, just in time for the vacationers to visit in hot summer months at the Jersey shore.

Upgrades to Watsessing Park Playground

Bloomfield Township, NJ

Client:
Essex County

Project Duration:
July 2018 to June 2018



RVE was retained by the County of Essex for engineering design and landscape architecture services for upgrades to Watsessing Park playground in Bloomfield, NJ. It is 15,000 square feet and provides something that most other playgrounds don't — inclusivity.

The park was built with special-needs children of all kinds in mind. Gently sloped ramps and large landings provide enough space for children in wheelchairs to enjoy the jungle gym and venture higher onto the structure than was possible in the past. In addition to the ramps and landings, the park provides visual, auditory and tactile surface features for children at lower-than-usual heights. The park was designed to allow children who are not walking, who aren't upright or are in wheelchairs to enjoy those features. Each landing area features at least three different stimuli for children, including tic-tac-toe and a set of musical pipes. Near a shady spot, children can spin wheels and listen to the sounds of beads rolling around or watch a rainbow fly by. One slide is made up of rollers, providing a different feel than typical plastic slides. The variety lets children with differing abilities find their own way to have fun. A second shaded area encompasses an instrument section and a cool-down station. Children can bang on bongos and play the xylophone while being sprayed by a cool mist.

The playground is the first park in Essex County developed for children of all physical and developmental abilities.

1600 Park & Hoboken Cove

City of Hoboken, NJ

Client:

City of Hoboken

Project Duration:

December 2010 to June 2013



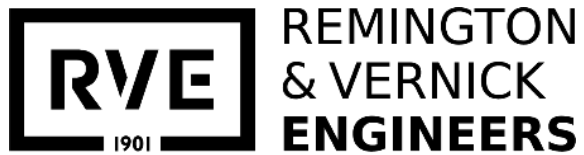
RVE was retained by the City of Hoboken to provide park design, bid specification preparation, bid support, and construction administration services for the new park space at the 1600 Park and Hoboken Cove sites. The project called for the construction of a new park on more than four acres of former industrial use property located on the north end of the City of Hoboken. RVE worked with Imbiano Quigley (IQ) Landscape Architects, P.C., on the park concepts.

RVE previously provided the City of Hoboken with conceptual design plans for this location and was familiar with the project site. In addition, we provided professional engineering services and landscape architectural support for the Hudson River Waterfront Walkway for the Stevens Institute of Technology.

The 1600 Park site is located north of 16th Street between Park Avenue and Willow Avenue. The Hoboken Cove site is located north of the Hudson River Waterfront Walkway that runs immediately north of the Hudson Tea Building and east of Park Avenue along the portion of the Hudson River Waterfront Walkway in Hudson County.

Services included reviewing plans and studies; meetings and coordination; field survey and topographical mapping; drainage design; permitting; utilities assessment; preliminary engineering; preparation of contract documents and construction management.

Client References



Client Reference List (Partial Listing)

Various clients throughout Southeastern Pennsylvania

CLIENT/AGENCY	CLIENT/REFERENCE	TELEPHONE
BUCKS COUNTY		
Falls Township	Matt Takita, Township Manager	215-949-9000
Langhorne Manor Borough	Jay Ferraro, Borough Manager	215-752-5835
Lower Makefield Township	John Lewis, Supervisor	267-274-1100
Middletown Township	Stephanie Teoli Kuhls, Township Manager	215-750-3800 x1141
Newtown Borough	Tara Grunde-McLaughlin, Council President	215-968-2109
Newtown Township	Micah Lewis, Township Manager	215-968-2800 x250
Township of Falls Authority (TOFA)	Tim Hartman, Executive Director	215-946-6062
Warminster Municipal Authority (WMA)	Timothy Hagey, General Manager	215-675-3301
Yardley Borough	Paula Johnson, Borough Manager	215-493-6832
CHESTER COUNTY		
Chester County	Dave Stauffer, Facilities & Parks Capital Projects Coordinator	610-344-6445
Phoenixville Borough	E. Jean Krack, Borough Manager	610-933-8801
DELAWARE COUNTY		
Chester Housing Authority	Maria M. Zissimos, General Counsel	610-876-5561 x110
Chester Water Authority	Robert A. Judge, Sr., Executive Director	610-876-8181
Delaware County	Jacob Bierling, Director of Public Works	610-891-4668
Delaware County Office of Housing and Community Development (OHCD)	Linda F. Hill, Executive Director	610-891-5425
Delaware County Regional Water Authority (DELCORA)	Robert Willert, Executive Director	610-876-5523
LEHIGH COUNTY		
Catasauqua Borough	Steve Travers, Borough Manager	610-264-0571
MONTGOMERY COUNTY		
Ambler Borough	Glenn Kucher, Code Enforcement Officer	215-646-1000
Brodhead Creek Regional Authority	David S. Horton, PE, Manager	570-421-3232
Conshohocken Borough	Stephanie Cecco, Borough Manager	610-828-1092
East Norriton Township	Robert Hart, Township Manager	215-814-9222
Hatboro Borough	Diane Hegele, Borough Manager	215-443-9100
Lansdale Borough	John J. Ernst, AIA, Borough Manager	215-368-1691
Montgomery County	Matthew Edmond, Infrastructure Planning	610-278-3742
Montgomery County Housing Authority	Joel Johnson, Executive Director	610-326-7332
Norristown Area School District	Robert C. Malkowski, Director of Operations	610-630-5021
Norristown Municipal Waste Authority	Greg Nestor, Board President	610-270-3191
Upper Gwynedd Township	Sandra Brookley Zadell, Township Manager	215-699-7777
Upper Merion Township	Anthony Hamaday, Township Manager	610-265-8722
West Norriton Township	Jason Bobst, Township Manager	610-631-0450
PHILADELPHIA COUNTY		
Philadelphia Department of Public Property	Roy Conard, AIA, LEED AP-BD+C, Design & Construction Project Manager	215-683-4479
Philadelphia Water Department (PWD)	William Dobbins, PE, Assistant Manager, Design Branch	215-685-6286