

PROJECT TEAM



Randy R. Kepler, PE, LEED AP | *Director of Engineering*

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Title and Responsibilities:

Mr. Kepler is the Director of Engineering and oversees daily engineering operations. He provides oversight to the design team and engineering project managers in our firm associated with civil site development, site design, soils engineering, and construction monitoring and testing.

Professional Profile:

Mr. Kepler is a professional civil engineer. He is a Licensed Professional Engineer in Virginia and West Virginia. He has experience in residential and commercial development, water system design, sanitary system design, water system modeling, distribution design including storage structures, sewer collection systems and pump stations, and permitting associated with each type of design. Mr. Kepler has spent 10 years working in or with state and local governing bodies and he is a past member of the Town of Strasburg's Planning Commission.

Office Location

151 Windy Hill Ln.,
Winchester, VA 22602

Education:

1991 – Bachelor of Science: Civil Engineering – North Carolina State University

Certifications:

2013 – VDOT Advanced Work Zone Traffic Control Certification

2009 – Accredited Professional – Leadership in Energy and Environmental Design (LEED AP)

2007 – Licensed Professional Engineer, West Virginia

2007 – Certified Planning Commission – Citizens Planning Education Association of Virginia

1998 – Licensed Professional Engineer, Virginia

Affiliations:

2005-2009 – Town Planning Commission Member – Town of Strasburg, VA

Experience:

2011-Present – Director of Engineering, Greenway Engineering

2001-2011 – Project Manager, Greenway Engineering

1998-2001 – Project Manager, Anderson & Associates – Middletown, VA

1991-1998 – Professional Engineer, Division of Water Quality, Department of Environment and Natural Resources, State of North Carolina

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Projects:

National Lutheran Boulevard: Frederick County, Virginia

Project manager and engineer for 6,100 linear foot four-lane urban collector road design to meet the County Comprehensive Transportation Plan. Worked with VDOT and County agencies to develop and design the four-lane road with grassed medians and superelevation to meet the needs of the locality. Work included pavement design, stormwater collection and management, intersection design with signalization, improvements to the existing Route 50 for intersection configuration, pedestrian travel ways, paths and ramps, and Maintenance of Traffic plan.

Museum of the Shenandoah Valley: Winchester, Virginia

Project manager and engineer for development of a 26,600 SF museum designed by Michael Graves & Associates. Responsible for design of site access road, pedestrian paths, grading, stormwater collection, stormwater management, water quality treatment, site lighting, and specific focus on coordination with architect to maintain historic features through new design of historic site. Provided sidewalk improvements on Amherst Street to enhance pedestrian friendly facilities. Work also included coordination with the City of Winchester to develop a localized water model and associated waterline upgrades to improve the City system and supply water demands for the proposed museum.

Charles Town Races and Slots: Jefferson County, West Virginia

Project manager and engineer for 200-acre site. Managed and designed site work for five phases of expansion, two parking structures, hotel, wastewater treatment facility, access roads, and miscellaneous projects. Structures include approximately 14.8 acres of coverage.

FEMA Office & Warehouse: Frederick County, Virginia

Project manager and engineer for 17-acre government site (approximately 161,000 SF building). Included all site work, stormwater collection and management, and developed site to meet LEED requirements. Services included processing documentations and application of civil based LEED qualifications with the US Green Building Council.

Rutherford Farms Industrial Park: Frederick County, Virginia

Project manager and engineer for design and construction of transportation improvements on Martinsburg Pike (Route 11) at the intersection of Rt 11 and I-81. Design included expansion of an existing two-lane road to a four-lane divided urban local road, four way intersection design, and associated impacts with surrounding areas and I-81. Road improvements were for approximately 2,300 linear feet and included pavement design, stormwater collection, traffic management, and pedestrian controls. Provided Maintenance of Traffic plans and striping plans that were coordinated with the VDOT inspector.

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C5 Fuel Cell Maintenance Hanger: Berkeley County, West Virginia

(2010-Under Construction) Project manager for design of a 78,800 SF hanger facility for fuel cell maintenance on the Air Force C5 airplanes. Facility is owned and operated by the 167th Airlift Wing of the West Virginia Air National Guard. Site and facilities were designed to meet Air Force and National Guard requirements. Site work included coordination of building location with adjoining buildings and runway/taxiway orientation, site layout and grading, stormwater collection, water distribution, and sanitary sewer collection. Also included detail design of concrete hanger apron and other site pavements, fencing, and physical site security for facility.

Bluestone Industrial Park: Stephens City, Virginia

Project manager and engineer for design and construction of transportation improvements to service the Bluestone Industrial Park. Road was considered the western Stephens City bypass road and consisted of 3,550 linear feet of improvements. Road is four lanes with median urban collector to act as a bypass road. Project included pavement design, stormwater collection, traffic management, and pedestrian controls. Road design required major improvements to the existing Fairfax Pike/Marlboro Road leading out-of-town to allow for tie in to the new bypass road. Project required coordination and adjustment to the FEMA floodplain in the area.

Harvest Hills Subdivision: Jefferson County, West Virginia

Project manager and engineer for 392-acre home subdivision design including dual entrances, two sanitary pump stations, water distribution, road design, and stormwater collection and management.

Lutheran Home Boulevard: Frederick County Virginia

Project manager and engineer for 6,100 linear foot four-lane urban collector road design to meet the County Comprehensive Transportation Plan. Worked with VDOT and County agencies to develop and design the four-lane road with grassed medians and superelevation to meet the needs of the locality. Work included pavement design, stormwater collection and management, intersection design with signalization, improvements to the existing Route 50 for intersection configuration, Maintenance of Traffic plan, and processing for a Conditional Letter of Map Revision from FEMA for floodplain impacts.

Navy Federal Credit Union: Frederick County, Virginia

Project manager and engineer for a 60,000 SF building and parking expansion onto an existing 100,000 SF facility. Work included grading design, stormwater management design, stormwater collection, and road improvements. Worked with architect and design team to ensure proper design. Provided construction period services for client.

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EcoLab Manufacturing: Berkeley County, West Virginia

Project manager for two facility expansions including the addition of two parking facilities for trucking units, associated grading and site improvements, stormwater management evaluation and revisions, stormwater collection and assistance with construction administration and project closeout with regard to bonding and County requirements

Stonewall Junction Subdivision: Lewis County, West Virginia

Project manager for commercial subdivision in a mountainous region on Route 33. Project included the development of the subdivision plat, access road design, stormwater collection, site grading, erosion and sediment control plan, stormwater management, water distribution, and sewer collection. Time included coordination of construction period services and multiple quantity takeoffs to quantify grading and earth removal.

Derby Ridge Subdivision: Strasburg, Virginia

Project engineer for 65-acre, 132-lot subdivision. Project designer for the offsite and onsite water distribution and sewer collection systems. Water design included water modeling and design of the distribution system that services the existing adjoining subdivision along with the proposed subdivision. Design included the creation of a new pressure zone with the addition of a water booster station and 462,000-gallon ground storage tank. Sewer design included the collection system along with dual sewer pumping stations with dual railroad crossings.

Americast: Frederick County, Virginia

Project manager and engineer for a new 76,000 SF concrete structure manufacturing facility on a 30-acre parcel. Worked closely with the general contractor and owner to ensure manufacturing equipment and process flow paths fit into the site layout and grades. Design included stormwater collection, grading, stormwater quality treatment and management, and erosion and sediment controls.

Southern Hills Subdivision: Stephens City, Virginia

Project engineer for 106-acre, 250 home subdivision design including sanitary pump station, and water distribution system design and modeling.

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Criser Road Booster Station: Town of Front Royal, Warren County Virginia

Project manager and design engineer for design of a 1,200 gpm water booster station for providing adequate water to a local subdivision. Booster station included 4 pumps and the associated controls, valves, and sensors for booster station to operate based on various system pressures. Station included 4 variable flows to provide a range of flows from 80 gpm up to a fireflow required 1,200 gpm flow. Booster station was provided with a maximum capacity of 1,595 gpm. Project included the associated site work, access road, multiple road designs, assistance with easement acquisition, and design of 6,500 LF of distribution system piping. Design included the necessary control valves for this area to operate as a separate pressure zone on the Town's existing water distribution system.

Route 11 Comprehensive Regional Water and Sewer Design: Rockingham County, Virginia

Project manager and design engineer for the design of a regional infrastructure extension for the County to provide water and sewer services to an unserved area. Project included the design of 12,000 LF of water distribution system to all existing facilities and the design of 15,000 LF of sanitary sewer collection design, a 400 gpm sanitary sewer pump station, and a 3 mile sanitary sewer force main. Project included coordination with all existing utilities and homeowners for location of water and sewer lines, water meters, valve vaults, etc. to minimize the disturbance to the existing lands. Work included coordination with the County on easement acquisition and with the power company for service to the pump station.

Single Family Septic System Designs: Multi-sites in Virginia

Project manager for multiple single-family septic and alternative sewer treatment with drainfield or point source discharge disposal designs. Average 250 designs per year.

Rockingham County – Lawyer Road Pump Station: Rockingham County, Virginia

Tasks included preliminary engineering report for design of a regional pump station with odor control for providing sewer to an existing subdivision, design, and construction period services.

Town of Luray – Generator Project: Luray, Virginia

Development and coordination of design and construction of installation of backup generators on the Town's water supply systems and sewer pump stations.

Town of Round Hill – Water System Improvements and Modeling: Round Hill, Virginia

Developed a Town-wide water model by surveying of existing system and flow testing for operational data. Provided model results and recommendations for improvements and designed improvements for waterline replacement.

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Town of Round Hill – Wastewater Treatment Plant Evaluation and Expansion: Round Hill, Virginia

Evaluated and completed report on operational deficiencies related to the operation of the WWTP to meet effluent limits. Project manager for the design of the expansion of the wastewater facility from 0.2 MGD to 0.50 MGD. Design included the conversion of the conventional extended aeration plant to a SBR facility.

Town of Woodstock – Water system Evaluation and Improvements: Shenandoah County, Virginia

Developed a Town-wide water model utilizing Town provided data to determine adequacy of existing system and areas in need of improvement. Evaluated expected growth and needs for infrastructure improvements. Developed report and presented to Staff and Council. Completed design for improvements based on results of model report that included the design of a 2.0 MG elevated water storage tank, upgrade of water treatment plant pumps, and associated line improvements. Provided services for assistance in payment options for tank including a water rate evaluation and recommendations to Council for fee increase options.

Town of Purcellville – Waterline Extension and Replacement: Loudoun County, Virginia

Project manager and engineer for multiple-street water main replacement project along the Town's main thoroughfare and several side roads. Work included coordination of underground utility location, design and scheduling of waterline replacement to ensure continual water service availability with minimal shutoff, and coordinated design with Town staff and maintenance personnel and DEQ for approval. Also included design for the repair and replacement of sidewalks, curb and gutter, hydrants, pavement, road striping, and signage.

Town of Purcellville – Town-Wide Water Model and Improvements: Loudoun County, Virginia

Developed a complete Town water model utilizing surveyed data and field run flow testing to determine adequacy of system. A report with recommendations was provided with phasing on schedule for improvements. Completed and managed design and construction of water main improvements based on results of model report. Major line improvement was for the replacement of approximately 7,000 LF of water line along Main Street. Contracted by Town to review proposed water line extensions by developers by review of plans for construction issues and updating of the system water model with proposed data to ensure adequacy.

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Town of Purcellville – Update of the Town Water and Sewer Master Plan: Loudoun County, Virginia

Developed and generated AutoCAD based mapping of Town water and sewer system through the use of GPS for location and through interviews with Town Staff to develop a working map for use in maintenance vehicles. This information was continually updated as new systems were installed and reviewed as a part of the project review contract with the Town.

Town of Round Hill – Water Supply Evaluation: Round Hill, Virginia

Evaluated existing water system and a major proposed development with additions to the existing water system. Evaluated to ensure compliance with system requirements and Town needs.

Town of Luray – Wastewater Treatment Plant Evaluation: Luray, Virginia

Evaluated the existing wastewater treatment system to determine if the system can handle an increase in flow. Evaluation included recommendations for modifications for the system to handle the expansion.

Town of Luray – Tannery Pump Station and Gravity Sewer Evaluation: Luray, Virginia

Determined capacities of both systems and problems associated with potential increase of flow from an industrial facility in Town.

Rockingham County, VA – Comprehensive Water and Sewer Feasibility Study

Detailed evaluation of water and wastewater needs for the Route 11 area north of Harrisonburg. Determined and provided the best alternatives for supplying water to the existing population. Evaluation included growth projections and alternative costs.

Rockingham County – I/I Study: Rockingham, Virginia

Evaluation of a gravity sewer system for a 150 home subdivision to determine areas of high inflow and infiltration. Made recommendations on areas needing improvements.

Town of Luray – Water Treatment Plant Evaluation: Luray, Virginia

Review engineer for proposed water treatment plant. Evaluated plans and specifications of a proposed package water treatment facility for the Town designed by a separate design firm. Determined compliance with current rules, regulations, and industry design standards.

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Town of Luray – On Call Engineering Services: Luray, Virginia

Provided engineering services for the Town of Luray. Tasks included utility design and evaluation, water and wastewater evaluation and design, general engineering duties, bid period and construction period services for various projects, and evaluation of funding options for projects. Sewer I&I studies, water system leakage studies, and improvements to localized stormwater issues.

Town of Round Hill – On Call Engineering Services: Round Hill, Virginia

Provided engineering services for the Town of Round Hill. Tasks included utility design and evaluation, water and wastewater evaluation and design, and general engineering duties.

County of Rockingham – On Call Engineering Services: Rockingham, Virginia

Provided engineering services for Rockingham County. Completed utility design and evaluation, water and wastewater evaluation and design, survey, and GIS services.

Mr. Kepler worked with North Carolina Division of Water Quality, Non-Discharge Permitting Unit and with the Division of Water Quality's NPDES Permitting Unit as an environmental engineer reviewing and approving different sewer collection systems, treatment systems, and disposal alternatives in discharge and non-discharge systems such as:

- **Collection Systems**
 - Gravity Sewer Systems
 - Pump Station-Force Main Systems
 - Low Pressure Sewer Systems
 - Vacuum Sewer Systems
- **Wastewater Treatment Systems**
 - Anaerobic Lagoons (including Animal Waste Systems)
 - Aerobic and Facultative Lagoons
 - Package Wastewater Treatment Systems
 - Oxidation Ditch Treatment Systems
 - SBR Treatment Systems
 - Nutrient Removal
 - Trickling Filters
 - Sand Filters
 - Constructed Wetland Treatment Systems
 - Small Flow Systems (i.e., Septic Tank, Sand Filter Systems)
- **Disposal Systems**
 - NPDES Discharge
 - Spray Irrigation Systems
 - Drip Irrigation Systems
 - Infiltration Basins
 - Reuse Systems such as Golf Course reuse and Industrial Waste reuse

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- **Residual Treatment And Disposal**
 - Class B Land Application of Residuals
 - Distribution & marketing of residuals (Class A) through composting, lime stabilization, etc
- **Additional responsibilities:**
 - Development and Implementation of the North Carolina NPDES General Permit program
 - Development and Implementation of the Animal Waste General Permitting Program for Swine, Poultry, and Cattle*