

**EDUCATION**

B.S., Mechanical Engineering, 2008, York College of Pennsylvania

**ADDITIONAL TRAINING / CERTIFICATIONS**

ET011755, Engineer in Training (EIT) in the Commonwealth of Pennsylvania  
LEED 2.2 Accredited Professional (Leadership in Energy and Environmental Design)

**EXPERIENCE**

Mr. Shovlin is an Engineer-in-Training in the Mechanical Engineering Division for Paragon Engineering Services, Inc. a Mechanical, Electrical and Plumbing Engineering Firm based in York, Pennsylvania. Paragon Engineering Services, Inc. has a very diverse client base throughout the country.

Peter's work experience includes design calculations, equipment selections, preparing studies and reports including probable construction costs, system comparisons, detailed system designs and technical specifications, shop drawings, code requirements and research, and field surveys/inspections. His experience with these types of systems has been applied to a wide range of building applications, including K-12 schools, colleges, hospitals, retail buildings, office buildings, manufacturing and industrial plants, and hotels. In 2008, Mr. Shovlin's expertise in sustainable design principals and insight into energy conservation and green building design earned him certification as a LEED® Accredited Professional.

**COMMERCIAL PROJECTS INCLUDE:**

**Heidler Roofing Office Building, York, Pennsylvania** - HVAC upgrades to incorporate office renovations for Heidler Roofing. A single gas fired/DX cooled rooftop unit provides heating, cooling, and ventilation.

**Third Avenue Streetscapes of Train Station Building, City of Coatesville, PA.** - Preparation of construction documents for design of interior building work including grade level police substation, track level waiting area, and two potential office fit out areas. Security improvements to the facility were a critical aspect of the design to help improve safety of the train passengers and surrounding community.

**The Glen at Willow Valley Retirement Communities, Lancaster, Pennsylvania** A five story private and semi-private residence retirement center that includes resident rooms, food serving rooms, community lounges, activity rooms, fitness areas, dining rooms, nurses stations, and laundry rooms on each floor. There is a central kitchen located on the first floor. During the recent renovations, the existing HVAC system was upgraded to meet the new space needs and configuration. The existing piping system was reused and reconfigured to meet the new heat pump capacity demands, and the central dedicated outdoor air unit was upgraded to accommodate the new ventilation requirements. A total of approximately 250 heat pumps were replaced. The new ventilation system supplies approximately 38,000 CFM of fresh air to the five floors. Before the new design started, a survey of the existing systems was conducted in order to maximize reusing the existing piping and ductwork. A high level of coordination between disciplines was incorporated into the design due to the tight space constraints.



**GOVERNMENT PROJECTS INCLUDE:**

**Pennsylvania DGS/PAANG Combined Army National Guard Readiness Center, Waynesburg, Pennsylvania.** –The 38,000 square-foot readiness center included office, training, and garage space for the Pennsylvania Army National Guard. The mechanical and electrical design used sustainable design practices to increase the energy efficiency of the building and to meet the new energy requirements for all United State federal buildings.

**Sixth Medical Logistics Management Center Company Operations Facility, Ft, Detrick, Maryland** – A new 4,500 square foot office building for the United States Army including HVAC, plumbing, and fire protection systems. The building’s electrical and mechanical design integrated anti-terrorist design features including the location of condensing units and electrical panels, as well as, louver locations.

**MUNICIPAL PROJECTS INCLUDE:**

**Limeport, Lower Milford Township, Pennsylvania** – Project consisted of the design of a recirculating sand filter type wastewater treatment facility with an average flow capacity of .024MGD and a peak flow capacity of .040MGD. Design included services for a control building and recirculating sand filter process system.

**Sudlersville, Sudlersville, MD** – Project consists of the construction of a new 1.4MGD wastewater treatment plant. Design includes services for an influent pump station, headworks building, biolac basin, control building, aerobic sludge digester and WAS pump station.

**Summerfield Oxford No. 4 Pump Station, Adams County, Pennsylvania** – Project consists of the design of 204GPM pump station for a wastewater collection system. Design includes services for a pump station building and wet well.

**Upper Saucon, Lehigh County, Pennsylvania** – Project consisted of the total replacement of an existing grit removal system for a 2.5MGD wastewater treatment plant. Design included services for selective demolition of the existing equipment and installation of new equipment that included a Pista type grit removal system, conveyer system and environmentally controlled enclosure.

**Valley Forge Pump Station Improvements, Valley Forge, Pennsylvania** – Mechanical design to provide heating and ventilation for the capacity upgrades at the Pothouse Road, French Creek, Whitehouse Road, and Pickering Creek Pump Stations. Ventilation air was increased to declassify the space, thus the facility did not require a division 1, class 1 design.

**York Wastewater Treatment Plant, York, Pennsylvania** – Project consists of total retrofits of existing buildings and processes for a wastewater treatment plant with an average flow capacity of 26MGD and a peak flow capacity of 42MGD. Design includes MEP services as required to retrofit building and processes to meet or exceed present day efficient requirements.

**SCHOOL PROJECTS INCLUDE:**

**Delone Catholic High School, Hanover, Pennsylvania** –The project includes a master plan for MEP system replacement in an existing 124,530 square foot private school to be accomplished in multiple phases. The scope includes new finishes, combined classrooms, new HVAC, new plumbing and new electrical service, plus new fire alarm, public address, clock & bell, voice and data systems. Existing hot water heating systems are to be replaced with gas furnaces and split system direct expansion cooling units. Three existing electrical services are to be replaced with a new 277/480V 2000 amp switchboard back-feeding some of the existing distribution. A diesel generator will provide backup power for current and future phases. Classrooms and corridors will utilize occupancy sensors for automatic control of new T8 fluorescent lighting.

**Hanover Street Elementary School, Hanover, Pennsylvania** – The project included a complete renovation of the existing two story 36,000 sf building plus a 8,000 sf classroom and office additions designed to accommodate seven phases. HVAC design services included a feasibility study and life cycle cost analysis preceding design of a variable refrigerant system (VRV) heat pump system with energy recovery ventilators and rooftop units for the gymnasium. A new 1200 amp, 277/480 volt, 3 phase electrical service was installed. New high efficiency lighting and automatic lighting control, power circuits for receptacles and equipment were installed throughout the school. Plumbing upgrades including new low flow fixtures, a full service kitchen, and new sanitary piping.

**Hardin County Schools, Savannah, Tennessee** – HVAC and plumbing design for renovations to five schools. Each school's mechanical design included demolition and new work drawings incorporating reusing ductwork, grilles, diffusers, and equipment.

**Immaculata University, Immaculata, Pennsylvania** – Provided professional services to review current remedial actions undertaken by the operations/construction team for the campus' heating system, and provide any appropriate recommendations to the existing site distribution system to provide heating solutions for several building on the campus.

**Otto-Eldred Elementary School, Eldred, Pennsylvania** – The project included a complete renovation of the existing 55,000 sf building plus a 2,000 sf technology classroom addition. HVAC design services included fan coil units with low temperature hot water heating and new 95% efficient condensing boilers. Ventilation and dehumidification was accomplished with energy recovery ventilators including direct expansion cooling and hot gas reheat. The existing power service was increased to 1200 amp, 277/480 volt, 3 phase. New high efficiency lighting and automatic lighting control, power for receptacles and equipment, voice and data systems were installed throughout the school. Plumbing upgrades included new low flow fixtures, and a new high efficiency tank-less gas fired water heater.

**Otto-Eldred High School, Eldred, Pennsylvania** – The project included a 3000sf lobby addition, renovations to create new bathrooms, replace several HVAC units and add cooling to the auditorium. HVAC design services included new rooftop units, fan coils, and a split system condensing unit and coil added to an existing air handler in the auditorium. Electrical design included new decorative and general lighting in the addition and renovated areas plus power for receptacles and new equipment. Plumbing upgrades included new low flow fixtures, and a new storm-water reclaim system for athletic field irrigation.

**Washington Elementary School, Hanover, Pennsylvania** – The project included a complete renovation of the existing two story 29,000 sf building plus a 9,000 sf gym, library and office additions designed to accommodate seven phases. HVAC design services included a feasibility study and life cycle cost analysis preceding design of a variable refrigerant system (VRV) heat pump system with energy recovery ventilators and rooftop units for the gymnasium. A new 1200 amp, 277/480 volt, 3 phase electrical service was installed. New high efficiency lighting and automatic lighting control, power circuits for receptacles and equipment were installed throughout the school. Plumbing upgrades including new low flow fixtures, a full service kitchen, and new sanitary piping and existing domestic water piping remained.

**Woodson High School, Fairfax, Virginia** - Mechanical design and project management for the phased renovation of a 350,000 square foot high school. Mechanical systems include 4-pipe valence with dedicated outside air heat recovery systems for the classrooms and water-cooled central chiller system.

**COMMUNITY PROJECTS INCLUDE:**

**HEALTH CARE AND ASSISTED LIVING PROJECTS INCLUDE:**

**INDUSTRIAL PROJECTS INCLUDE:**