

# PARAGON

Engineering Services, Inc.

**Brian Martin**

*Electrical Designer*

## EDUCATION

Associate Degree in Specialized Technology of Computer Aided Drafting & Design -  
2001 - York Technical Institute

## ADDITIONAL TRAINING / CERTIFICATIONS

Basic Electricity - The Electric League of Maryland - 2006

## EXPERIENCE

Mr. Martin is presently an Electrical Designer 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.



While working for another employer, Mr. Martin served as a Computer Aided Drafter for a medium size firm and began training as an Electrical Designer. Mr. Martin's primary responsibility was the electrical and mechanical drafting for his group, but also contributed to design and installation of electrical systems, including power, lighting, telephone, data, fire alarm, security, sound, nurse call, etc.

Prior to that role, Mr. Martin served as an Electrical Drafter for a large size firm responsible for drafting duties in the electrical division. Additional responsibilities included estimating and lighting design.

## General Projects include:

**Homewood at Plum Creek, Hanover, Pennsylvania** - This project was done in two phases. The first phase was a two story assisted living facility with a large commons area consisting of retail spaces and a large dining area. Project also included exercise rooms and a pool. Electrical design consisted of lighting, power, fire alarm, voice/data wiring and CATV. The project tasks also included performing engineering calculations, circuitry, panel schedules, panel sizing, one-line diagram, emergency generator sizing, and require fixture schedules and symbol schedules. The second phase consisted of an additional wing for assisted living with extension of systems from the phase 1 building. The facility consisted of 27,400 square feet of living space and 52,000 square feet of community space.

**West York Area School District, West York Middle School, York, Pennsylvania** -The scope of the Middle School included design of a new 157,600 square foot school for 900 6th through 8th grade students on the existing Junior High School site. The design separated the grade facilities and will accommodate future additions for 150 more students. Sustainable design practices were used, including site plans, energy efficiency, material systems, air and water, and waste reduction. The building itself helps demonstrate energy conservation and compatibility with the environment. With "Green Design" mission, core team members applied five fundamentals of sustainable design: site planning, energy efficiency, product properties, air and water, and waste reduction. These fundamentals became integral parts of the educational program. In addition to an analysis of heat loss/heat gain, energy loads and natural light, the final site plan created the most efficient use of the site for physical education and athletic needs, including rearranging the fields to gain an additional physical education space. A comparative analysis evaluated all systems and products according to thirty-two specific design criteria, including energy efficiency, maintenance cost, operating cost, ease of operation, environmental impact both during construction and during operation and use, code compliance, and impact upon other systems.

**West York Area School District, Renovations of Four Elementary Schools, York, Pennsylvania** - Programming and schematic design for HVAC, accessibility, data wiring, and security improvements for four elementary schools.

**West York Area High School Renovations and Addition, York, Pennsylvania** - Extensive renovations and additions to high school, including replacement of mechanical and air conditioning systems, upgrade of auditorium, expansion of library, and improvements for handicap accessibility.

**U.S. Postal Service, CFS Unit HVAC Upgrade, Baltimore, Maryland** - Prepared construction documents for the replacement of the existing HVAC unit.

**Tobyhanna Army Depot Electrical Distribution System, Tobyhanna, Pennsylvania** - Assessment of the electrical distribution network from the transfer point of power at the utility company source (69 KV) through the 15 KV substation to the main distribution panel at each structure (building, pump house, antenna, etc.) within the Tobyhanna complex.

**Pennsylvania Turnpike Commission, Inspection of Tuscarora Tunnel, Huntingdon and Franklin Counties, Pennsylvania** - Detailed structural inspection of both tubes of the mile-long Tuscarora Tunnel. Due to a truck accident during our work, we inspected accident damage and acted as general contractor to design and manage repairs.

**Muncy State Correctional Institution for Women, Muncy, Pennsylvania** - Design consisted of renovation of existing coal-fired boilers and associated equipment; replacement of 7,500 feet of steam distribution piping; upgrade to the primary electrical equipment (to each building on campus); and construction of one 128-cell L4 (close custody security) housing unit of approximately 33,000 square feet.

**Mergenthaler Vocational Technical High School, Baltimore, Maryland** - Architectural/engineering services to renovate vocational technical high school.

**Fairfax County Public Schools, Floris Elementary School Renovation/Addition, Herndon, Virginia** - A/E design and construction management to add 12,000 square feet of new classrooms, cafeteria, administration areas, and to renovate a 72,000 square foot facility that includes a library/media center, food services, and reconfiguration of classrooms.

**Yorktowne Medical ASC, York, Pennsylvania** – This project includes engineering services for a 12,000 square foot ambulatory surgery center. Electrical services incorporated power distribution with convenience receptacles, fluorescent general illumination, night light, emergency lighting, lighting controls, short circuit and voltage drop calculations. Other technology systems built-in were outlet boxes, Cat6 wire, and conduit/ladder system for telephone and data systems. The automatic fire alarm system included smoke detectors, heat detectors, flow and tamper switches, manual pull stations, door holders, and horn/strobe to be extended to the fit-out area from the existing building systems.

**EVAPCO HVAC Testing Laboratory, Taneytown, Maryland** - mechanical and electrical design for a 12,100 square foot HVAC testing laboratory. This project included two laboratories, control room, and two boiler mezzanines above the control room. Design included lighting, 2000 amp 277/480 volt 3 phase service, control wiring from VFD's to PLC's, combined starter/disconnect switches with pin and sleeve receptacles to service as test stations and power to several boilers.

**Susquehanna Oral Surgery Center, York, Pennsylvania** – This project includes engineering services for a 7,000 square foot oral surgery center. Electrical services incorporated power distribution with convenience receptacles, fluorescent general illumination, emergency lighting, lighting controls, short circuit and voltage drop calculations.

**Wellspring Medical Center - Hayshire, York, Pennsylvania** – This project includes engineering services for renovation work to a 4,500 square foot general patient care facility and expansion of the facility to 11,000 square feet. Electrical services incorporated the addition of x-ray & mammo equipment, power distribution with convenience receptacles, fluorescent general illumination, night light, emergency lighting, lighting controls, short circuit and voltage drop calculations. Coordination with automatic fire alarm system including smoke detectors, heat detectors, flow and tamper switches, manual pull stations, and horn/strobe to be extended from the existing building systems. Coordination with the nurse call notification vendor which included master nurse stations, patient room stations, and dome light notification system.

**Wellspring Orthopedic at Deatrick Commons - Gettysburg, Pennsylvania** – This project includes engineering services for a 10,000 square foot orthopedic care facility. Electrical services incorporated x-ray equipment, power distribution with convenience receptacles, fluorescent general illumination, night light, emergency lighting, lighting controls, short circuit and voltage drop calculations. Coordination with automatic fire alarm system including smoke detectors, heat detectors, flow and tamper switches, manual pull stations, and horn/strobe to be extended from the existing building systems. Coordination with the nurse call notification vendor which included master nurse stations, patient room stations, and dome light notification system.