

PARAGON

Rodger C. Lease, PE

Engineering Services, Inc.

Director of Mechanical Engineering

EDUCATION

B.S., Mechanical Engineering, 1992, Pennsylvania State University

REGISTRATIONS

AL, 24380	MD, 26188	NJ, GE43022	DC, PE900278
	VA, 0402-036036		
FL, 57322	WV, 14955	PA, 053422-E	NCEES, 19779



ADDITIONAL TRAINING / CERTIFICATIONS

LEED 2.0 Accredited Professional (Leadership in Energy and Environmental Design)

EXPERIENCE

Mr. Lease is currently Director of Mechanical Engineering at Paragon Engineering Services, Inc., responsible for design, coordination, and construction administration of mechanical building systems including HVAC, plumbing and fire protection. Some of his other duties include business development and checking other mechanical designs.

Mr. Lease began his career in the construction industry with a large engineering firm and expanded his experience with more industrial type projects at a medium sized engineering firm. As a mechanical engineer, Mr. Lease gained 12.5 years combined experience in various aspects of mechanical systems design and construction and various types of projects. Design and construction related experience included system analysis and selection; load calculation; central plant design; air, hydronic, low and high pressure steam distribution; HVAC and plumbing equipment selections; industrial process piping, ductwork, and equipment layouts; specification of fire protection systems; code analysis and evaluation; cost estimating; energy analysis; site survey and investigation; value engineering; HVAC controls and instrumentation; product and material selection; technical specifications; construction administration and shop drawing review. Design-bid and design-build project experience included schools, prisons, offices, churches, manufacturing and other industrial facilities.

Prior to his work in the building construction industry, Mr. Lease gained nearly 3 years experience as a field test engineer for an International manufacturer of hydraulic turbines, pump turbines, and hydro-electric equipment.

Church Projects Include:

Celebrate Life Christian Church, Lititz, Pennsylvania – Mechanical, electrical, plumbing design, and fire protection performance design for a new 13,000sf facility with classrooms, offices, kitchen, dining, and multipurpose sanctuary/ theatrical/ gymnasium space. The building design accommodates a second phase expansion which will convert the functions of many of the existing spaces and triple the size of the facility with more classrooms, dedicated gymnasium and sanctuary spaces. The mechanical system included condensing gas furnaces and one packaged gas/dx rooftop unit coupled with dedicated outside air energy recovery ventilation units. Electrical systems included a 400amp 208v/3ph service, power distribution, lighting and sound systems with stage dimming, fire alarm and battery emergency lighting.

Healthcare and Assisted Living Projects Include:

Elmwood Medical Center, York, Pennsylvania – This project consisted of two separate facilities, a 3700 square foot medical office area and a 4800 square foot endoscopy center for Class B surgery.

Heating, ventilation and air conditioning services included a rooftop VAV System with hot water reheat for procedure, recovery, clean, utility, offices and examination rooms. Special consideration and requirements were needed for scope processing area, recovery area and procedure rooms which consisted of low returns, exhaust and humidification. Project also included interior fluorescent illumination, emergency lighting and lighting controls, an emergency backup generator, voice/data requirements, fire alarm systems and nurse call station.

Yorkshire Animal Hospital, York, Pennsylvania – mechanical and electrical engineering services for 8600sf renovations and additions to an existing animal hospital including reconnection of existing systems. Project included surgery area with HEPA filtration, treatment area, recovery rooms, exam rooms, etc., designed to meet the AIA guidelines for hospital and health care facilities and American Animal Hospital Association guidelines. Design included battery emergency lighting, fire alarm, phone/data outlet systems and power for receptacles and owner supplied equipment

Dr. Satish Shah Cancer Center, Gettysburg, Pennsylvania – mechanical and electrical engineering services for an 11000sf cancer treatment center with two water-cooled linear accelerators and one simulator. The accelerators were supplied with chilled water cooling systems and domestic water backup cooling. The radiation areas were completely shielded in a concrete vault. The design required special considerations for lighting and devices such as hospital grade receptacles, medical MC cable and raceways. Design included battery emergency lighting, fire alarm, phone/data outlet systems and power for receptacles and owner supplied equipment.

Adams Diagnostic Imaging, Gettysburg, Pennsylvania – mechanical and electrical engineering services for a 6000sf imaging center with x-ray, ultrasound, and MRI with shielding and all non-ferrous mechanical and electrical components. The MRI was supplied with a chilled water cooling system and domestic water backup cooling. Cryogenic relief and emergency exhaust systems were also provided for the MRI. The MRI and equipment rooms were provided with humidification, de-humidification and individual temperature control. The design required special considerations for lighting and devices such as hospital grade receptacles, medical MC cable and raceways. Compact fluorescent lighting was used for general illumination and incandescent lighting was used in the MRI room. Design included battery emergency lighting, fire alarm, phone/data outlet systems and power for receptacles and owner supplied equipment.

Dr. Barber/ Total Eye Care, Westminster, Maryland – mechanical and electrical engineering services for a 6200sf eye care center with exam rooms, photo rooms, dilation areas, waiting rooms, etc. The lighting design, fixtures, and controls included special considerations for adjustable lighting levels where patients' eyes are extra sensitive such as dimmable incandescent lighting in exam rooms. General illumination design included high efficiency fluorescent fixtures. Design included battery emergency lighting, fire alarm, phone/data outlet systems and power for receptacles and owner supplied equipment.

Chester County Eye Associates, Exton, Pennsylvania - mechanical and electrical engineering services for a 6600sf eye care center with exam rooms, photo rooms, dilation areas, waiting rooms, etc. The lighting design, fixtures, and controls included special considerations for adjustable lighting levels where patients' eyes are extra sensitive such as dimmable incandescent lighting in exam rooms. General illumination design included high efficiency fluorescent fixtures. Design included battery emergency lighting, fire alarm, phone/data outlet systems and power for receptacles and owner supplied equipment.

Albright Avenue, York – this project consisted of electrical and mechanical design for 7,500 square foot Human Services building with a 2,500 square foot second floor renovation in the adjacent building, with a 2,200 square foot renovation of a detached pole building. Mechanical services included heating, cooling,

and ventilation system and temperature control system. Plumbing system calculates supply and drainage fixture units for fixtures and equipment.

Gettysburg Commerce Park – design/build services for a two story 55,000 square foot Medical center. Mechanical systems and equipment with architectural structural systems will allow for sufficient space for maintenance and improve aesthetics. The project consisted of heating, ventilating and air conditioning systems, plumbing piping and fixtures, power distribution within the building to include convenience receptacles, power for all building systems.

Commercial Projects Include:

Apple BMW, York, Pennsylvania – This design/build support services for a 14,000 square foot new facility. Project consisted of a show room, sales offices and preparation bays. Design included HVAC, Plumbing, Power and lighting. The mechanical system included condensing gas furnaces and packaged gas/dx rooftop Units. Power distribution to include convenience receptacles, power for all building systems and owner supplied equipment, interior lighting design.

Rutter's Stores, Numerous Locations – These projects include both new and renovated facilities. The projects generally include MEP drawings for condition adaptation of the Rutter's standards to meet site constraints while maintaining the Rutter's 'feel'. Some sites include auxiliary functions as well including car wash facilities. A partial list of stores include Richland Ave, Marietta, Mt. Zion, Waynesboro, Jacobus, Shippensburg, New Freedom, W. Market St., East Berlin, Bell Rd, N. Hills Rd., etc.

Hooters Restaurant – design/build reconstruction of the 4,800 square foot building. The design systems and modifications to existing systems to comply with IBC 2003. Installation of mechanical systems and equipment with architectural and structural systems for sufficient space for maintenance and improve aesthetics. Electrical services will include new power service of the existing service entrance; convenient power receptacles; interior lighting design to include fluorescent general illumination, night lighting, battery emergency lighting and lighting controls.

Municipal Projects Include:

East Manchester Township Building, East Manchester, Pennsylvania - design and development of the mechanical and electrical systems for a renovation to the existing police station. Project included demolition, rooftop HVAC unit, plumbing alterations, power, lighting, and systems.

Lower Chanceford Township Building, Lower Chanceford, Pennsylvania - design and development of the building heating, ventilating and air conditioning systems; building plumbing systems to include domestic water piping and sanitary waste piping; building electrical systems to include interior lighting, exterior lighting, power service, power distribution, and accommodations for telephone, data, fire, and security systems by owner; all for an office area, a service bay, and garage. The facility consisted of 3,000 sq. ft. office, 1,500 sq. ft. service and a 4,600 sq. ft. garage.

Springfield Township Municipal Building - Heating, cooling and ventilating of offices was accomplished with ground source geothermal heat pumps. Under floor radiant piping was used to provide even, efficient space heating. Separate split system air handlers were used for the meeting rooms. Electrical consisted of fluorescent lighting for offices, security lighting over exterior doors, battery powered units for emergency lighting, sound system with ceiling speakers, desk and floor mounted microphones.

Industrial Projects Include:

Snyder's of Hanover, Hanover, Pennsylvania - design and development of the building heating, ventilating and air conditioning systems to include rooftop heating, ventilation, and air conditioning systems for the addition with direct expansion cooling and natural gas heat; building plumbing systems to include extending the existing water and natural gas services to the addition, potable hot and cold water, sanitary waste and vent, and storm drainage systems including related plumbing fixtures. Electrical systems to include the evaluation of the existing electrical loading of the building, primary switch addition to existing exterior switchgear, primary service entrance to the plant, primary and secondary main switchgear, power distribution to include 480/277V distribution panels with associated step-down transformers and 208/120V distribution panels, relocated scales, new SBR Tank, interior lighting, exterior lighting for new parking areas, new dock area, and basketball court; and accommodations for telephone, data, fire, and security systems by owner. The project consisted of approximately 75,000 square foot addition to the existing facility. The addition includes approximately 12,500 square feet of office area, expanded line area, new packaging area, and new warehouse area.

Sheridan Press, Hanover, Pennsylvania – design for this project consisted of demolition of 30,000 square foot existing Tennis Court Facility and 9,600 square foot existing office area and the construction of 27,000 square foot warehouse/staging area addition and 30,000 total square foot, two story office addition at the site of the existing production facility in Hanover Pa. The office addition consisted of small individual offices, large open space offices, conference rooms, server room and gang toilets. The warehouse/staging area addition included lighting, lighting control, power, power for mechanical, UPS system design, modifications to the existing generator system, new primary electric service and new parking lot lighting. This was a design/build project with Swam Electrical Contractors.

Martin's Pastries, Chambersburg, Pennsylvania – This project included HVAC design service to add cooling in Phase I and Phase II office areas of existing facility. Design consisted of cooling and ventilation requirements for an air cooled chiller, terminal fan coil units, air/air ERU w/dehumidification and general ventilations fans.

Ashley Furniture – the project was a design/build total renovation of the existing 37,600 square foot building. Mechanical, electrical, plumbing design and fire protection performance was designed. Services will include a heating and cooling ventilation system for a cost efficient service. Coordinate required wall and roof openings with structural and architectural components. Plumbing services will include layout and sized piping systems connected to the plumbing fixtures, including hot and cold water, recirculated hot water, natural gas, sanitary and ventilation piping.

School Projects Include:

Ravenna Business College, Ravenna, Ohio – This was a design/bid project consisting of a one-story, 20,000 square foot Business College. Mechanical services included heating, cooling and ventilating system, plumbing piping and fixtures and size and select water heater, design and installation of a wet pipe fire protection sprinkler system. Provided new power distribution service to include convenience receptacles, interior lighting design included fluorescent general illumination, night lighting, emergency lighting and controls. Provisions were made for data, fire alarm, security/card access, sound, CATV and clocks.

Community Projects Include:

Gettysburg YWCA, Gettysburg, Pennsylvania – This project includes electrical and mechanical engineering for a 12,000 square foot addition on the first floor and 3,000 square foot of office space on the second floor. Mechanical services included heating, cooling, and ventilation system, installation of mechanical systems and equipment with architectural and structural systems, and layout and size air distribution and piping distribution systems. Electrical services include Interior lighting design including fluorescent illumination, night lighting, battery emergency lighting, and lighting controls. Automatic fire alarm system was extended to the additions and an empty outlet box and conduit system for owner supplied voice/data system.