MH Professional Engineering, PLLC

UNIVERSITY PROJECT EXPERIENCE

RENOVATE MASSRY CENTER – BB 001 COMPUTER CLASS LAB DIGITAL FORENSICS AND CYBER SECURITY, SUNY ALBANY
Albany, NY

- Lead Mechanical, Electrical, and Fire Protection Engineers for the comprehensive redesign and reconstruction of existing janitorial and storage space within Massry Center – BB 001 to create a cutting-edge computer class lab and conference room. This transformation caters specifically to the specialized needs of the new MS Digital Forensics and Cyber Security program at the university.

MH Professional Engineering completed the following:

- Replaced and repositioned sprinkler heads to align with the redesigned ceiling layout.
- Eliminated redundant systems in unoccupied spaces to optimize functionality.
- Implemented a new variable air volume box with hot water reheat system to efficiently serve the requirements of the new classroom and conference room spaces. This involved seamless integration with the existing air handling unit and hot water system while carefully considering the constraints of the basement ceiling space.
- Engineered comprehensive control solutions for the new equipment, interfacing with the existing direct digital control system to ensure optimal performance and monitoring capabilities.
- Orchestrated the disconnection and removal of outdated lighting, power, and systems from the areas designated for renovation, paving the way for a fresh, modern infrastructure.
- Integrated pendant LED lighting with emergency fixtures and generator transfer devices to enhance safety and sustainability within the renovated spaces.
- Established fire alarm, power, and data networks, including quarantine and house networks, to support the diverse technological requirements of the computer class lab and conference room.
- Delivered seamless fire alarm, power, and data connectivity to the “Situation Room,” ensuring a secure and reliable operational environment.
- This revitalization project represents a significant milestone in the university's commitment to fostering excellence in digital forensics and cyber security education, providing a state-of-the-art facility to empower the next generation of industry professionals.

MH Professional Engineering, PLLC

UNIVERSITY PROJECT EXPERIENCE

IMPROVE PEDESTRIAN BRIDGE LIGHTING, SUNY BROCKPORT
Brockport, NY

- Lead Electrical Engineer for the door and ceiling modifications for an existing ADA access bridge/stair.
- Provided removal plan for all lighting in the areas of open ceiling reconfiguration.
- Provided removal plan for all fire alarm devices in the area of open ceiling reconfiguration.
- Provided new LED lighting and exit signs in the areas of new ceiling installation.
- Provided normal and emergency power for applicable LED lighting.
- Provided replacement lighting controls to meet current code requirements.
- Provided power to actuated doors.
- Provided new mounting locations for fire alarm devices.

MH Professional Engineering, PLLC

UNIVERSITY PROJECT EXPERIENCE

SMART ENERGY BUILDING, BINGHAMTON UNIVERSITY
Binghamton, NY

- Lead Fire Protection Engineer for the design of 114,000 ft^2 building on the SUNY Binghamton campus.
- The building houses the departments of chemistry and physics, including 56,000 ft^2 for research, 125 fume hoods and 45 faculty offices.
- The facility provides room for faculty, industry scientists and engineers to work side-by-side to create new energy technologies and maintain and expand the regional workforce.
- Features include microturbines on mechanical systems, a fuel cell to produce electricity at a reduced cost to heat and cool the building, photovoltaic panels on the roof to produce electricity, hydronic radiant heating in the floor, controlled LED lighting, individual space monitoring of chemicals to reduce air flows and energy use, and water-cooled equipment wherever possible to conserve energy.

MH Professional Engineering, PLLC

UNIVERSITY PROJECT EXPERIENCE

DESIGN OF PHARMACY BASEMENT, BINGHAMTON UNIVERSITY
Binghamton, NY

- Lead Electrical Engineer for the design of a 10,279 ft^2 shell space within the Binghamton University School of Pharmacy.
- Provided electrical design drawings for shell space removals of power, lighting and fire alarm.
- Provided electrical design including power, lighting, data, fiber and fire alarm for fit-out spaces: University Police Department, Environmental Health Services and server room for Information/Technology Service.
- Provided electric power distribution to HVAC, plumbing, fire protection, data racks, lighting, general receptacles, and specialized equipment. The building's systems were laid out in compliance with 2015 NYS Building Codes, NFPA 72, ADA, the 2014 National Electrical Code, and the 2015 IECC.
- Designed a 350kW/438kVA generator for emergency power and a shared UPS for all tenants.
- Designed power, switching and wiring to indoor lighting, associated controls, egress lighting, and exit signs.
- Designed modifications to fire alarm system layout with the appropriate interlocks to mechanical HVAC equipment for the fit-out areas. Designed VESDA detection system for server room.
- Designed data outlet locations with provisions of properly located empty raceway/cable tray/conduit to accommodate data wiring. Coordinated requirements with University ITS Department.
- Provided raceway system for security equipment, and raceway/conduit/120V power connections for security/access control systems. Coordinated requirements with University ITS Department.
- Provided power and fire alarm system support for NIST Fire Protection System



MH Professional Engineering, PLLC

UNIVERSITY PROJECT EXPERIENCE

NEW ATHLETICS FIELD HOUSE, STATE UNIVERSITY AT BUFFALO
Buffalo, NY

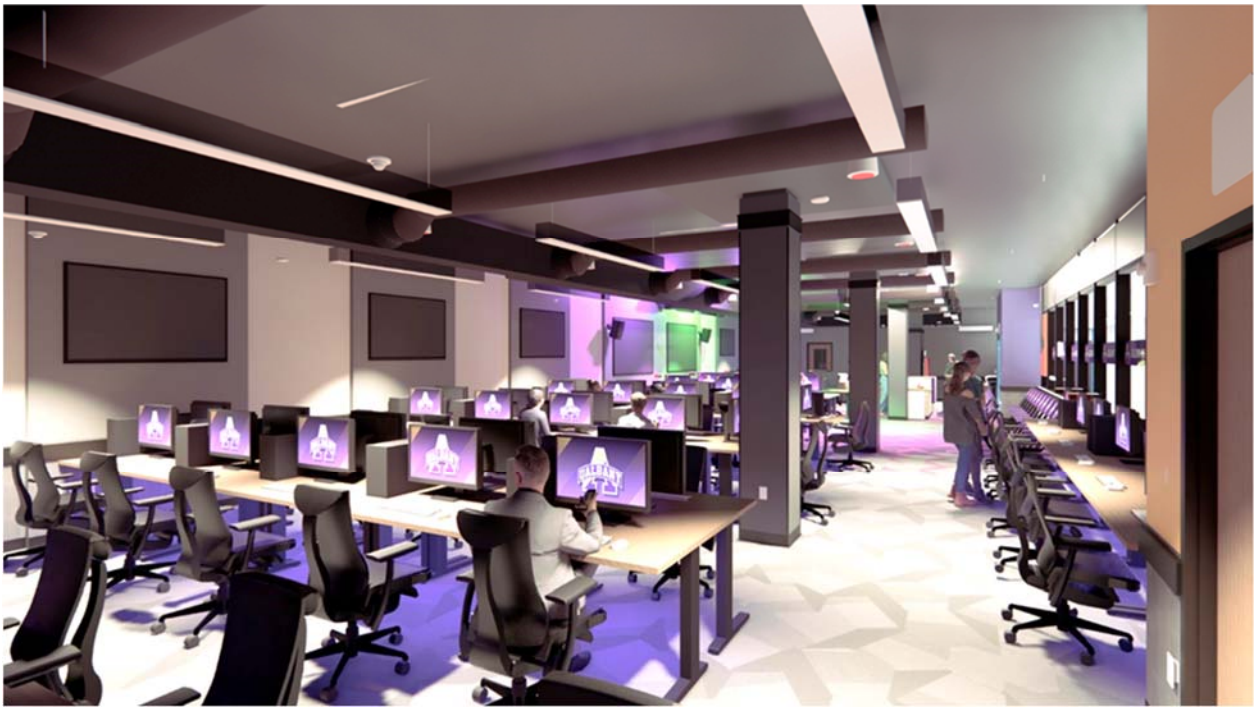
- Lead Electrical Engineer for the design of a new 92,000 ft^2 Athletics Field House for the State University at Buffalo.
- Located on the university's North Campus, the multi-use facility, known as the Murchie Family Field House, features a full-size football field, a rubber track, a long/triple jump and pole vault pits, as well as motorized suspended softball hitting tunnels.
- The project involved a comprehensive investigation of the existing campus power distribution system, culminating in the design of incoming service for the new building. The electric power distribution was carefully planned to cater to the specialized needs of the building and its specialized equipment, ensuring compliance with all applicable codes.
- The scope of work encompassed the design of power, switching, and controls for indoor lighting, exterior building-mounted lighting, site lighting, egress lighting, and exit signs. Additionally, the project included the design of fire alarm voice evacuation, aspiration detection, and initiating notification device layout, complete with appropriate interlocks to mechanical HVAC equipment. An empty raceway/conduit system was designed to accommodate telephone, data, A/V video recording system, and security/access controls.
- MH Professional Engineering facilitated the seamless integration and distribution of electrical systems within the Athletics Field House, meeting the highest standards of safety, compliance, and functionality for the State University at Buffalo.

MH Professional Engineering, PLLC

UNIVERSITY PROJECT EXPERIENCE

eSPORTS RELOCATION AND EXPANSION, SUNY ALBANY
Albany, NY

- Lead HVAC and Fire Protection Engineers for the design of a 2,500 ft^2 renovation from a vacant former computing center into an eSports (electronic sports) Arena. The space consists of 60 gaming stations with viewing area and IT/AV spaces.
- HVAC design involved coordinating a modular air handling unit (AHU) with energy recovery into an existing basement with minimal access. Ventilation and exhaust paths were tightly coordinated around existing spaces. Exhaust path included direct buried ductwork to a new exterior areaway due to existing constraints.
- Heating for the space was provided through a new dedicated heat exchanger off the campuswide high temperature hot water system. Included planning for future low temperature hot water system. Cooling for the main AHU and IT/AV computer room air handling units (CRAHs) is provided through new taps on the existing campus year-round chilled water system.
- Coordinated new HVAC controls with existing building management system provider.
- Existing space did not have sprinkler coverage. Fire protection design included replacing and upsizing an existing zone control assembly to adequately cover the current spaces, eSports Arena, and future expansion into adjacent spaces. Tightly coordinated routing of piping above existing ceilings in occupied offices and main corridors.



Courtesy of CSArch

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UNIVERSITY PROJECT EXPERIENCE

CULKIN HALL ELEVATOR UPGRADES, SUNY OSWEGO
Oswego, NY

- Lead Electrical Engineer for the design of replacing two elevators for SUNY Oswego.
- Provided electrical removal design drawings showing existing elevators fuses, feeders, transformers and disconnects being removed. Showed existing lighting, smoke hatch fire alarm connection and smoke detector being disconnected and reconnected for roof work associated with the elevator shafts. Showed removal work in the pits; lighting, switching, receptacle(s) and all appurtenances associated with the elevator maintenance and control.
- Provided electrical new work design drawings showing new fuses, feeders, disconnect switches for the elevators. Showed existing cab disconnect switches with extension of existing emergency power circuits. Showed new work in elevator pits; lighting, switching, receptacle(s) and kill switches.
- Provided elevator control schematic to indicate elevator recall and shunt trip devices.
- The building's systems were laid out in compliance with 2015 NYS Building Codes, NFPA 72, ADA, the 2014 National Electrical Code.

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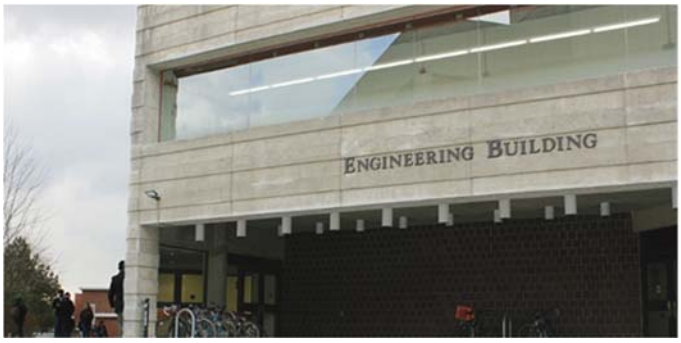
UNIVERSITY PROJECT EXPERIENCE

ENGINEERING BUILDING CRITICAL MAINTENENACE, BINGHAMTON UNIVERSITY
Binghamton, NY

- Lead Electrical Engineer for the renovation and complete electrical service upgrade for Binghamton University's 98,500 ft^2 Engineering Building.
- Provided electrical removal design drawings showing existing interior and exterior lighting, power, elevator, data, fire alarm, security system being removed.
- Provided electrical new work design drawings showing new lighting, lighting controls, power distribution and panels, receptacles, data, cable tray, fire alarm and security system.
- Designed the incoming medium voltage (13.2kV/12.47kV) from the existing pad mounted switches to the two (2) medium voltage switches. One (1) switch is fed from existing feeder 401 and the other switch is fed from existing feeder 501. The campus presently has a 13.2kV system. In the future they want the capability of changing over to a 12.47kV system. A multi-tap transformer, T1, was designed to be able to give the campus that capability without having to replace this new equipment. T1 primary is 13.2kv/12.47kV multi-tap and the secondary is 480V. Transformer T2 is the primary 480V to secondary 208V service transformer.
- Designed circuiting, switching and wiring to indoor lighting, associated controls, egress lighting (interior and exterior), and exit signs.
- Designed fire alarm, horn/strobe, pull station and initiating device layout with the appropriate interlocks to mechanical HVAC equipment.
- Designed data outlet locations with provisions of properly located empty raceway/cable tray/conduit to accommodate data wiring.
- Provided empty raceway/conduit and back boxes for security equipment and raceway/conduit/120V power connections for security systems.
- Provided raceway/conduit/120V power connections for Siemens BMS System.
- Provided elevator control schematic to indicate elevator recall and shunt trip devices.
- The building's systems were laid out in compliance with 2015 NYS Building Codes, NFPA 72, ADA, the 2014 National Electrical Code.



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UNIVERSITY PROJECT EXPERIENCE

WHITEFACE MOUNTAIN FIELD STATION RENOVATIONS, SUNY ALBANY
Wilmington, NY

- Lead Electrical Engineer for renovation of a scientific research station located in the Adirondack Mountains.
- Built in 1961, the field station comprises two scientific research facilities, including a lodge, which houses a lecture hall as well as office and research laboratory space. An annex building houses dry and wet laboratories, offices, and storage facilities.
- Provided upgraded power distribution, including panelboards, feeders and conduits.
- Provided new grounding for all proposed raceway systems, disconnects and devices.
- Provided power and convenience outlet branch circuits, devices, and power circuits to data rack equipment.
- Replaced existing power panels at the base of the spiral staircase.
- Added an emergency power sub-panel on Level 3.
- Repowered IT rack receptacles via power conditioner thru proposed panel LP-PC1 and thru the sub panel on Level 3.

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UNIVERSITY PROJECT EXPERIENCE

CHEMISTRY AND PHYSICS LAB AND OFFICE RENOVATIONS, SUNY ALBANY
Albany, NY

- Provided space programming and design services for roughly 2,000 ft^2 of office spaces and 10,000 ft^2 of instructional and research lab spaces in various locations on the Uptown Campus of the University at Albany. Instructional and research labs will be designed for biological, chemistry, and/or environmental engineering use.
- Programming phase included evaluation and prioritization of the program needs for life sciences, chemistry, environmental engineering, and bioengineering laboratories, class labs and offices; assessment of Chemistry and Physics Buildings' utilities and building systems to determine if they have the capacity or can be renovated with the capacity to become laboratories, class labs and/or teaching labs; and match program with available spaces and building system capacity.
- The existing, original HVAC systems were evaluated for purposes of maximizing the number of fume hoods that could be installed in the available spaces. Hired and managed a Test & Balance Contractor in order to obtain accurate information about the existing HVAC system.
- To date, several spaces have been reprogrammed. HVAC, plumbing and electrical plans have been produced and the projects are under construction.
- Additional space programming and design work is ongoing.

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UNIVERSITY PROJECT EXPERIENCE

BOOKSTORE AND AC-2 REPLACEMENT, SUNY ALBANY
Albany, NY

- Lead Mechanical, Electrical, and Fire Protection Engineers for the rehabilitation of the existing campus bookstore.
- The intent of the project was to give the existing bookstore "a facelift" to increase functionality of the space, meet the current needs of both the staff and the students, and to revitalize the bookstore finishes to complement the recently completed campus center expansion project.
- The original scope, as envisioned and budgeted, involved a "fit-out" level of renovation: New diffusers, new lighting, ceiling speakers, and the relocation of power, data, and sprinkler heads. All work was intended to be completed over the course of the summer in two phases to keep the bookstore partially open.
- The existing conditions investigations brought to light more serious infrastructure deficiencies in the space. The existing HVAC system within the space is operating in a very limited manner. The existing fire alarm system is no longer supported and device and wiring upgrades were needed to tie into the new Simplex 4100 ES. The existing BMS system connection to the space had been disconnected during a previous renovation.
- The air handling unit that serves the bookstore and a few other spaces was requested to be replaced by the campus, since all the distribution associated with the unit was going to be replaced and the unit was currently approximately 40 years old. Due to the physical location of the air handling unit, the decision was made to rebuild/rehabilitate components of the unit in place.

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UNIVERSITY PROJECT EXPERIENCE

MACDONOUGH HALL, SUNY PLATTSBURGH
Plattsburgh, NY

- Provided Electrical and Plumbing engineering design services for the rehabilitation of the roof at MacDonough Hall at SUNY Plattsburgh.
- Prepared electrical design sketches showing preliminary power distribution sources for snow melt systems.
- Prepared design development sketches showing locations of roof leaders for coordination.
- Designed electric power distribution to snow melt system.
- Designed snow melt system and associated controls.
- Designed storm water drainage system from building's flat roof area, including exterior piping to existing manhole structure.

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UNIVERSITY PROJECT EXPERIENCE

HUNT STUDENT UNION, SUNY ONEONTA
Oneonta, NY

- Lead Mechanical, Electrical, Plumbing, and Fire Protection Engineers for the renovation of the 24,000 ft^2 student union at SUNY Oneonta.
- Provided electrical new work design drawings showing new lighting, lighting controls, power distribution and panels, HVAC, receptacles, data, cable tray, fire alarm and security system.
- Designed power, switching and wiring to indoor lighting, associated controls, egress lighting, and exit signs.
- Designed modifications to existing system, including fire alarm, horn/strobe, pull station and initiating device layout with the appropriate interlocks to mechanical HVAC equipment.
- Designed data distribution system, including new data closet layout, cable tray drops and wiring in close coordination with campus IT department.
- Provided raceway system and back boxes for security system.
- Provided electrical design for new elevator, including elevator recall, shunt trip devices, and emergency power.
- The building's systems were laid out in compliance with 2015 NYS Building Codes, NFPA 72, ADA, and the 2014 National Electrical Code.
- Renovation of the HVAC systems included replacement of existing hot water reheat coils with variable air volume boxes and hot water reheat coils. The existing air handling units remained since they were recently replaced. Fin tube radiators and ductwork were removed throughout the project and rezoned to comply with the new space layout. All pneumatic controls were replaced with DDC controls to tie into an existing front-end system. All heating hot water piping within work area was replaced. All existing ductwork to remain was cleaned.
- Plumbing system renovations included the removal of several abandoned restrooms. Several new hand sinks were installed for breakroom/conference rooms, and a recirculation station with a thermostatic mixing valve was installed at the existing water heater.
- The project work area had a standpipe fire protection system only. A new wet sprinkler system was installed throughout.

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UNIVERSITY PROJECT EXPERIENCE

PODIUM REHABILITATION, SUNY PLATTSBURGH
Plattsburgh, NY

- Lead Mechanical, Electrical, and Plumbing Engineers for the rehabilitation of the podium walkways at SUNY Plattsburgh.
- Designed a hydronic snow melt system to accommodate 47,000 ft^2 of podium walkways.
- Conducted a utility source and capacity investigation for snow melt system.
- Provided equipment and pipe layouts and sizing for new mechanical rooms to support snow melt system.
- Designed the removal and reinstallation of walkway drainage systems for 47,000 ft^2 of raised walkway including areas of "Green Roof."
- Designed new lighting systems for 39,000 ft^2 of walkway.
- Designed electric heat trace system for walkway drainage.
- Designed the removal and replacement of electrical systems that interfered with the areas of the podium that required full reconstruction.

KELLAS HALL, SUNY POTSDAM
Potsdam, NY

- Lead Mechanical, Electrical, and Plumbing Engineers for the design of two new toilet rooms within an existing lecture hall building.
- HVAC system consisted of the modification of an existing supply ductwork system and new dedicated exhaust system consisting of a new roof mounted exhaust fan and exhaust ductwork system.
- Plumbing systems included water and sanitary systems and modifications to the existing storm water drainage system.
- Complete electrical design included lighting, receptacles and fire alarm system upgrade.

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UNIVERSITY PROJECT EXPERIENCE

DANA HALL, SUNY CANTON
Canton, NY

- Lead Mechanical and Electrical Engineers for a feasibility study for the complete renovation of Dana Hall. The building contains a gymnasium, a former pool, locker rooms, and other support spaces, as well as offices for the university police department.
- The building programming included removing the old pool structure and gaining the floor space by infilling the pool and adding a second story to the space.
- HVAC upgrades included replacing the entire heating system, adding code compliant ventilation to all areas, and adding air conditioning to the building.
- All plumbing and fire protection systems were to be replaced.
- The electrical systems (power distribution, lighting, tel/data, security, etc.) were to be replaced, including main electrical switchgear.

UPGRADE COOKING LABS, MACDONALD HALL, SUNY DELHI
Delhi, NY

- Lead Mechanical, Electrical, Plumbing, and Fire Protection Engineers for the upgrade of cooking laboratories, modernization of kitchen infrastructure, and the renovation of the overall area to make lab facilities fully-accessible.
- Designed completely new make-up air and ductwork system for kitchen hood replacements, including complicated control system for make-up air and hood exhaust due to building physical limitations placed on make-up air location and size.
- Designed new plumbing systems for reconfigured spaces, including new grease traps and propane distribution to appliances.
- Electrical systems included new lighting, new power distribution, replacement panels, IT/AV security and access control.
- Project has been cancelled by SUNY for the moment.

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UNIVERSITY PROJECT EXPERIENCE

BEARD WELLNESS CENTER, SUNY COBLESKILL
Cobleskill, NY

- Lead HVAC Engineer.
- Replaced electric heat and 40-year-old air handling unit, and added air conditioning to building.
- Provided roof mounted gas-fired heat/DX cooling units.
- Modified ductwork as necessary to marry up with new rooftop units.
- Structural support was required to be added to the roof for the new units.
- Provided new gas service to building to serve rooftop units, a future generator and future building addition.

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UNIVERSITY PROJECT EXPERIENCE

SUB-BASEMENT LECTURE CENTER, SUNY ALBANY
Albany, NY

- Lead Mechanical, Electrical, Plumbing, and Fire Protection Engineers.
- Project included the complete rehabilitation of two television studios and ancillary support areas.
- Project also included the rehabilitation of the campus water-side economizer system that serves mission critical cooling loads throughout the Podium. Failing evaporative coolers were replaced with dry coolers to move the campus toward meeting regulation changes concerning cooling towers. System was also upgraded to utilize campus chilled water loop in the summer.
- Electrical system was replaced within studios and coordinated with the needs of an audio-visual consultant.
- Campus BMS and fire alarm systems were upgraded/expanded.
- Campus Fire Alarm system was expanded for the reconfigured spaces.

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UNIVERSITY PROJECT EXPERIENCE

BOUCK HALL RENOVATIONS, SUNY COBLESKILL
Cobleskill, NY

- Lead Mechanical, Electrical, Plumbing, and Fire Protection Engineers for the complete renovation of a performance theater and mechanical upgrades to gymnasium.
- Gymnasium upgrades included replacement of air handling units, as well as the addition of air conditioning and the addition of a sprinkler system.
- Theater upgrades included replacement of air handling units, replacement of sprinkler system, all lighting, and theater systems.
- A chilled water system was added to the building through the addition of a chiller.
- Building Management System (BMS) in building was completely replaced and upgraded.
- Electrical systems were upgraded to support the mechanical and theatrical upgrades.
- Fire alarm system was expanded.

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UNIVERSITY PROJECT EXPERIENCE

SIBLEY HALL, SUNY PLATTSBURGH
Plattsburgh, NY

- Lead Fire Protection Engineer for the design of a new fire sprinkler system for Sibley Hall, located on the SUNY Plattsburgh campus.
- Sibley Hall was constructed in 1966 and most systems are in poor condition. The building and its major systems have reached or exceeded their useful life. This project is the first phase of a larger building-wide renovation project.

MEMORIAL HALL MASTERPLAN, SUNY PLATTSBURGH
Plattsburgh, NY

- Lead Mechanical, Electrical, Plumbing, and Fire Protection Engineers.
- Project scope was to provide a feasibility study to increase available recreational space, improve and expand the fitness center, improve the experience for athletic recruits, and upgrade the aging original (1960s) mechanical and electrical infrastructure.
- Through review of existing building plans, on-site review/inspection of existing conditions, and interviews with building occupants and facility maintenance staff, specific mechanical and electrical problems were identified:
  - Failing switchgear and panels
  - Failing heating and ventilating units
  - Building not connected to campus high temperature water loop
  - No air conditioning
  - Humidity and temperature control issues in natatorium causing moisture problems elsewhere in building
  - Poor physical security
- The direction from the campus and SUCF was that the building had to remain open and functional during the proposed construction. As part of the study, an extensive phasing plan to replace all the mechanical and electrical systems and add sprinklers was developed.
- Although the project scope was a feasibility study only, schematic level HVAC design was completed for major mechanical systems/equipment in order to plan appropriate mechanical spaces; plan the logistics of phasing the mechanical replacement while keeping the building occupied; and in order to create estimates that reflected the likely scenario of completing the upgrades using multiple construction contracts based on funding availability.

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UNIVERSITY PROJECT EXPERIENCE

ST. ANTHONY HALL, WILLIAMS COLLEGE FEASIBILITY STUDY
Williamstown, MA

- Lead Mechanical, Electrical, Plumbing, and Fire Protection Engineers for a feasibility study commissioned by Williams College to determine the physical condition of St. Anthony Hall and evaluate program needs and to study options for renovation and expansion.
- St. Anthony Hall serves as the academic space, residential hall, and dining hall for Center for Development Economics students.

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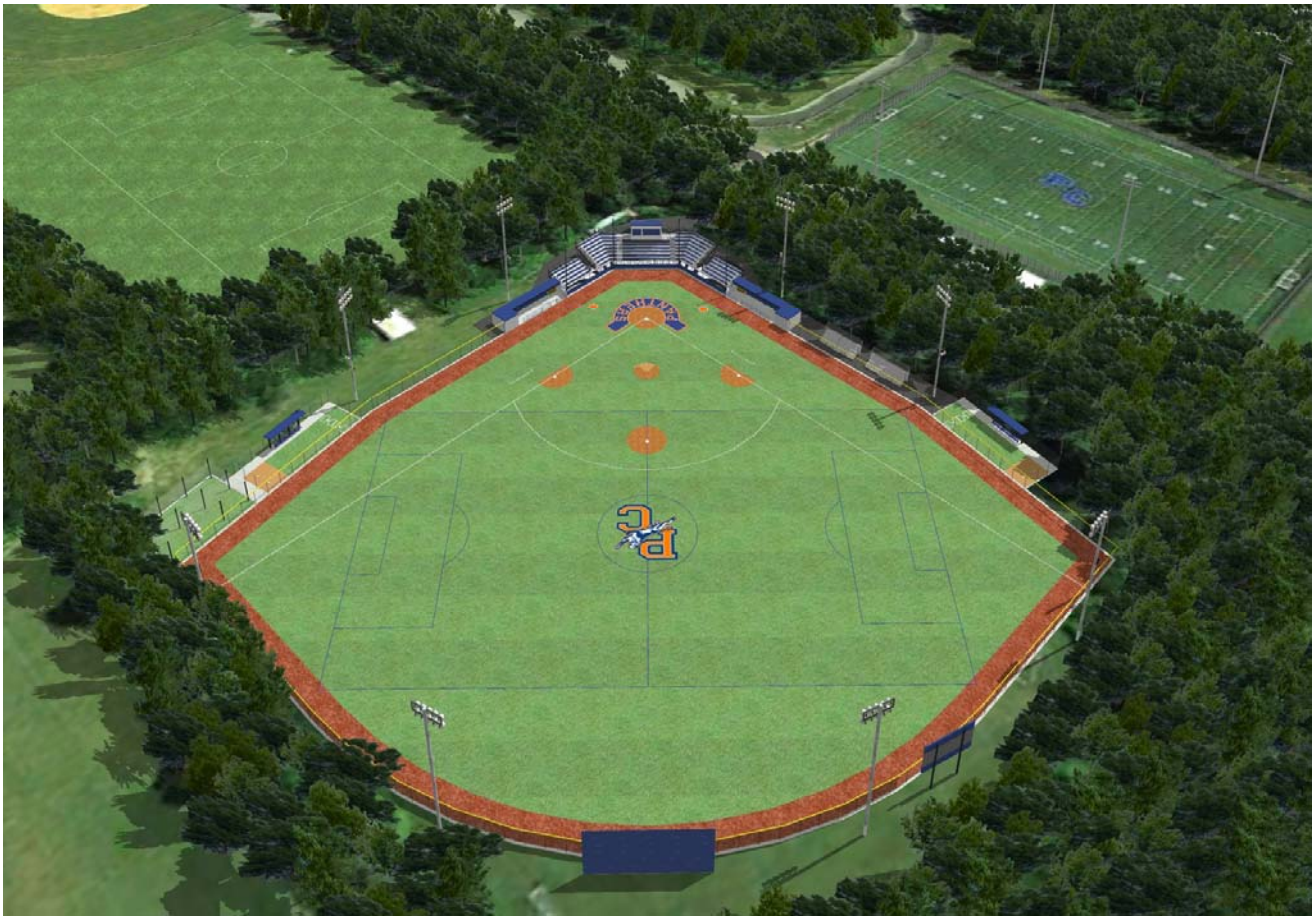
UNIVERSITY PROJECT EXPERIENCE

SUNY PURCHASE SITE LIGHTING
Purchase, NY

- Design of wiring for new baseball field MUSCO 80' – 100' tall sports lighting poles.
- Two of the sports lighting poles contained LED fixtures for security lighting after hours.
- Project also entailed design of power to 1 baseball field scoreboard, 1 softball field
- scoreboard, 2 lacrosse shot clocks, and 1 prefabricated press box.
- Lighting and power was designed to each of the two dugouts.
- Power was designed to two new bullpens.
- The existing parking lot lighting was also expanded into a new parking lot and walkway.



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UNIVERSITY PROJECT EXPERIENCE

RED DRAGON FIELD, SUNY ONEONTA
Oneonta, NY

- Lead Electrical Engineer.
- Design of power/communications to new in-ground power/communications boxes.
- Design of power for the replacement scoreboard with integral play clock.
- Design of power for the new play clock.
- Design of relocation/interception of existing underground feeder serving existing press box.
- Design of relocation/interception of existing miscellaneous underground conduits/circuits.

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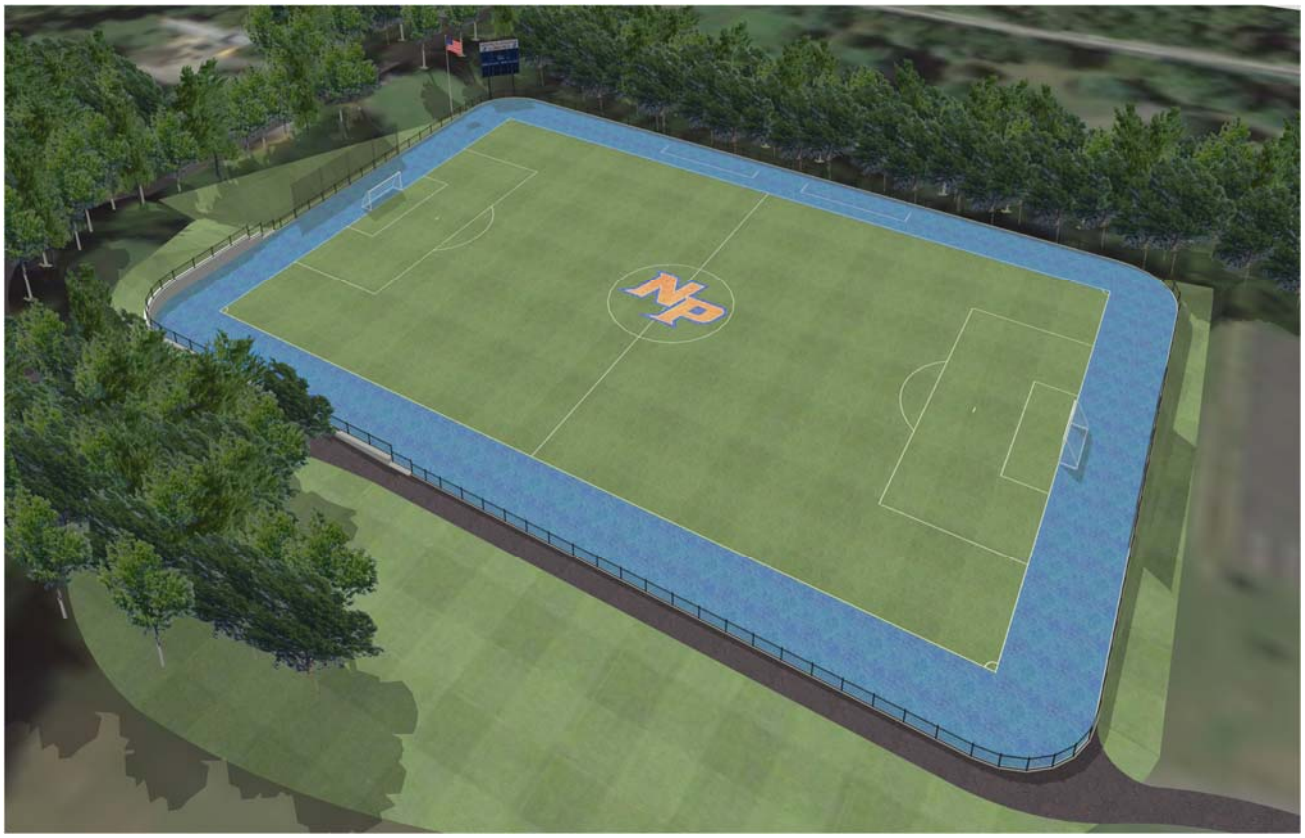
UNIVERSITY PROJECT EXPERIENCE

TURF SOCCER FIELD, SUNY NEW PALTZ
New Paltz, NY

- Lead Electrical Engineer.
- Designed new power and controls for new scoreboard.



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NEW GREENHOUSE, SUNY CORTLAND
Cortland, NY

- Lead Electrical Engineer for the design of a new greenhouse on the SUNY Cortland campus.
- Designed power distribution, including new 150A service to greenhouse equipment (vents, shades, fans, heaters, water heater, evaporative cooling system).
- Designed general lighting for headhouse and moveable/adjustable lighting system for grow lighting.
- Designed fire alarm system, including carbon monoxide detection and notification.
- Designed greenhouse control system.

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UNIVERSITY PROJECT EXPERIENCE

ICEPLEX BUILDING 105, SUNY MORRISVILLE
Morrisville, NY

- Lead Electrical Engineer for upgrades to SUNY Morrisville Iceplex.
- Provided electrical engineering design for HVAC equipment replacement.
- Designed new LED lighting and new LED exit and egress (emergency) lighting to be installed in locker room/lobby/office area of the Iceplex.
- Provided electrical design to modify existing fire alarm system to accommodate new ceilings and HVAC equipment.

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UNIVERSITY PROJECT EXPERIENCE

PARKING LOT IMPROVEMENTS, SUNY FARMINGDALE
Farmingdale, NY

- Lead Electrical Engineer for the renovation of existing parking lots and walkways.
- Parking lot design consisted of powering the parking lot lights, running conduit and conductors from nearby building, and providing lighting contactors and circuit breakers as required.
- Powering the walkway lights included running conduit and conductors to a nearby building, providing lighting contactors and circuit breakers as required, and coordinating with campus standard blue light.
- A spare conduit system was run alongside the power conduit.
- Every third light pole was designed with a pullbox for future IT needs.

PARKING LOT IMPROVEMENTS, SUNY ONEONTA
Oneonta, NY

- Lead Electrical Engineer for the parking and sidewalk improvement project for the Fine Arts Building at SUNY Oneonta.
- Designed conduit and wiring to parking lot and roadway lighting.
- Provided design of power and cabling to outdoor blue light.
- Coordinated reusing existing branch circuiting with the campus.
- Coordinated with grading and proposed stair.

SOFTBALL FIELD UPGRADES, SUNY FARMINGDALE
Farmingdale, NY

- Lead Electrical Engineer for the design of a softball field as well as walkway light to the field.
- Provided services included:
  – Powering the field lighting
  – Powering the pressbox
  – Providing fiber to the pressbox
  – Walkway lighting
  – PA raceway
  – Scoreboard power
  – Flagpole lighting
  – Phones to the dugouts
  – Power and lighting in the dugout storage room
  – Receptacles to each bullpen

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UNIVERSITY PROJECT EXPERIENCE

REHABILITATE ENTRY, NOLD HALL, SUNY FARMINGDALE
Farmingdale, NY

- Lead Electrical Engineer for the design of a new bus stop, powered signage and site lighting for SUNY Farmingdale.
- Provided electrical design drawings showing power distribution, lighting and controls.
- Investigated the existing campus power distribution system.
- Provided electric power distribution to specialized equipment.
- Provided communications and data interconnects conduit to specialized equipment.
- Provided conduit for future campus safety use, camera/radar.

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UNIVERSITY PROJECT EXPERIENCE

THEATER RENOVATIONS, GOODRICH THEATER, SUNY ONEONTA
Oneonta, NY

- Lead Electrical Engineer for the design of a new 158-point theatrical dimming rack system.
- Provided electrical design drawing showing power distribution.
- Investigated the existing campus power distribution system.
- Provided electric power distribution to specialized equipment.
- Designed the new power feeds for the dimming equipment, ER1 panel, stage winch, and raceways for all the control points.
- Provided pathways for electric J connector strips.
- Provided pathways and SJO cables for GIJBs.

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UNIVERSITY PROJECT EXPERIENCE

HULBERT HALL INTERIOR RENOVATIONS, A, B & C WINGS, SUNY ONEONTA
Oneonta, NY

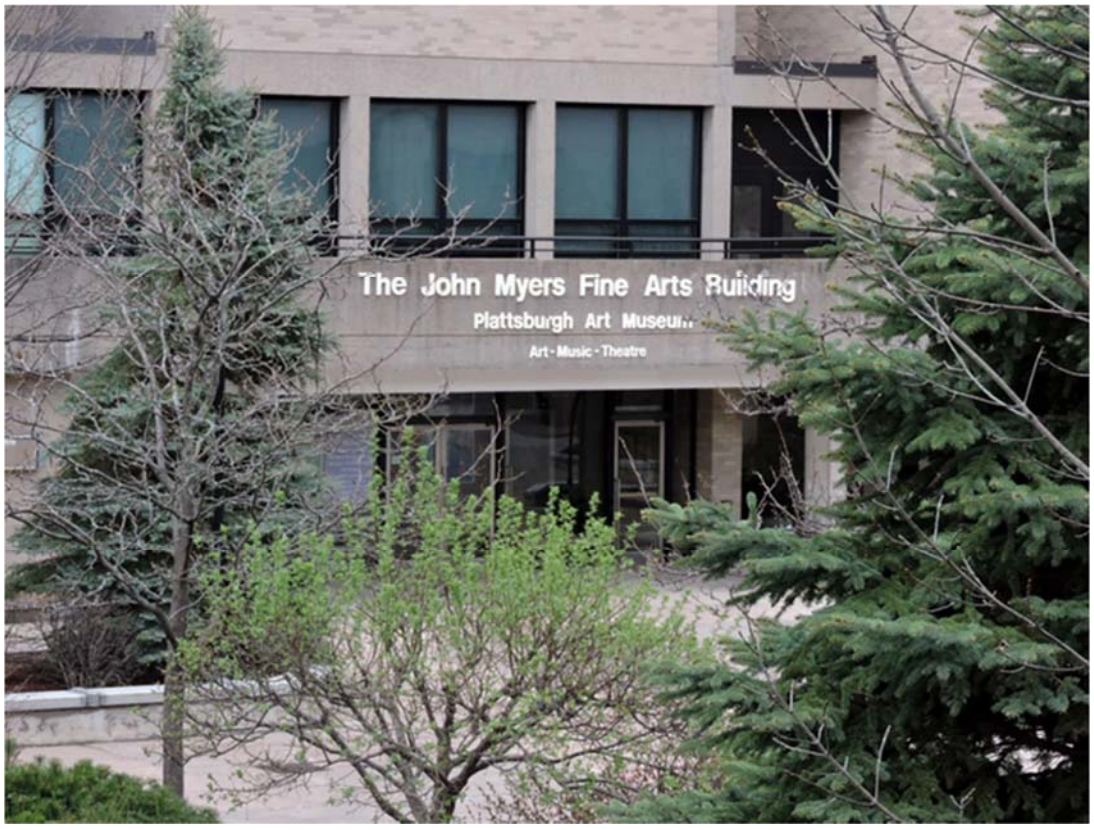
- Lead Mechanical, Electrical, and Plumbing Engineers for the design of a 27,350 ft^2 partial college dormitory renovation. Spaces included the renovation of 27 multi-occupant restrooms, 12 single-occupant restrooms, 4 kitchens, 4 lounges, and adjacent corridors.
- Majority of restrooms replaced in kind with upgraded piping and finishes. Six multi-occupant restrooms upgraded to be single-occupant ADA gender-neutral restrooms.
- Replaced existing domestic water risers back to main in crawlspace tunnel. Added hot water recirculation system at each riser. Replaced branch riser valves and improved access to floor branch isolation valves.
- Upgraded plumbing fixtures to meet new layout. Due to existing structural plank construction, shower base pans were custom units to match existing drain location. New floor drains coordinated around existing structural floor.
- Provided new exhaust ductwork in space to accommodate new layout connected to existing central exhaust system and improved access to existing fire dampers.
- Provided new domestic kitchen range hoods with integral fire suppression systems and corresponding ductwork to the exterior.
- Corridor improvements included:
- Decorative recessed linear LED fixtures with integral occupancy sensors in new ceiling.
- Relocation of existing wireless access points.
  - Relocation of existing fire alarm smoke detectors and notification appliances.
  - Upgraded fire alarm system from analog to digital in A Wing.
- Provided wall-mounted exit signs with wire guards to prevent future vandalism.
- Bathrooms electrical upgrades included:
  - Decorative recessed linear LED fixtures with ceiling-mounted, dual-technology occupancy sensors.
- Provided individually controlled LED downlighting in each shower stall.
- Provided GFCI receptacles in the bathrooms.
- Relocation of existing switching and fire alarm devices.
- Added Kitchen and Lounges in A Wing:
  - Provided decorative surface linear LED fixtures with ceiling-mounted, dual-technology occupancy sensors, and added downlights over the kitchen counter.
  - Provided general tamperproof and arc-fault receptacle power, as well as microwave & oven/ range.

MH Professional Engineering, PLLC

UNIVERSITY PROJECT EXPERIENCE

MYERS FINE ARTS BUILDING, SUNY PLATTSBURGH
Plattsburgh, NY

- Lead Electrical Engineer for the design of HVAC equipment upgrades and office space reconfiguration.
- Removed power connections to HVAC equipment.
- Removed fire alarm connection(s) to HVAC equipment.
- Removed office lighting and any controls.
- Designed power connections to proposed HVAC equipment, reconfiguring existing, older electrical panels.
- Designed all required fire alarm connections to proposed HVAC equipment upgrades.
- Designed LED recessed troffer lighting, exit signs and lighting controls in the renovated office area.



MH Professional Engineering, PLLC

UNIVERSITY PROJECT EXPERIENCE

PODIUM SERVICE TUNNEL FIRE DOOR REPLACEMENT, SUNY ALBANY
Albany, NY

- Lead Electrical Engineer for the design of fire alarm and power support for service tunnel fire doors replacement at SUNY Albany.
- Disconnected and reconnected electrical devices that would be in the way during construction; exit signs, emergency lighting units (ELUs), conduits, lighting, etc.
- Disconnected and reconnected power to motorized overhead fire door(s).
- Designed temporary heat detection for construction.
- Provided conduit pathways for 24V and SLC fire alarm wiring.
- Designed fire alarm system integration to door controllers.