



Giuffrida Engineering inc.



Giuffrida Engineering inc.

564 Pine Street
Middletown, CT. 06457

(860) 346-3094

Email - mq@giuffrida.com

www.giuffrida.com

Master Planning

Adapting to the Future

As the healthcare industry evolves, carefully executed Master Planning during the capital planning process ensures success when replacing, upgrading or repurposing important facilities. Striving to help our clients make informed decisions to meet their financial goals is the driving force behind our Master Planning services. We do this through comprehensive planning and design including a range of services from vision planning and site assessments through space planning, cost engineering and fundraising campaign support.

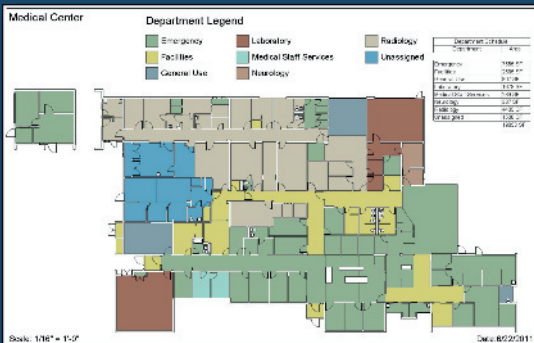
GEi takes a comprehensive look at an organization's present condition and what changes are needed to adapt to the changing future. We help our clients from the earliest stages of planning and design including program and facility requirements, through the documentation process to address the unique challenges and opportunities presented by each project. We listen, learn, and adapt the final solution to address the client's needs and concerns.

Team Development & Management

No project will succeed without the right team of design professionals on board. Once a project has completed preliminary planning, we work with our clients to develop a "Request for Proposal" (RFP) to be issued to selected architectural & engineering firms. We then work with the client to identify appropriate design firms that will be asked to participate in the selection process. Firms are vetted based on experience with similar project types and their areas of expertise, ensuring each candidate is qualified for the particular project. We then review each firm's submission, develop a summary, conduct interviews if requested, and make recommendations for firm selection team. Once design has commenced, we will collaborate with the owner to ensure design efforts are properly aligned with project goals every step of the way.

Master Planning Services

- Comprehensive Master Planning
- Vision Planning
- Requirements Analysis
- Planning Charrettes
- Land Use Planning
- Site Analysis and Programming
- Benchmarking and Project Justification
- Capital Project Cost Estimating
- Fundraising Support
- Capital Project Peer Reviews
- Site Design
- Space Planning
- Architectural, Civil, MEP and Landscape Design
- Project Management Team Development
- Existing Building Conditions Assessments & Documentation
- Facility Talent and Organizational Evaluations
- Facility Maintenance and Operations Reviews



Giuffrida Engineering inc.

Owner's Project Management

Project Delivery

GEi understands that successful project delivery begins well before construction document development, and continues beyond building occupancy. We therefore provide a wide range of project management services from inception through contract closeout, at all times aligned with the client's needs and representative of the client's interests.

Planning & Organizing

All successful projects begin by defining realistic goals and objectives. GEi works with building owners to understand their needs and develop clear project scoping documents for use by design professionals and cost estimators. Once we have organized the final project team, we continue to take an active role in adjusting program requirements as necessary to maximize project value while retaining required functionality.

Project Leadership & Control

With the final construction documents in place, GEi will transition to oversight and management of the construction process. We will work closely with the construction manager or general contractor to ensure that the owner's interests are protected at all times. This includes a myriad of day-to-day activities ranging from final vetting of subcontractors, through monitoring of construction progress and safety protocols, culminating in management of the turnover and project closeout process.

Project Management Services

- Initial Planning
- Program Development
- Design Review
- Bid Solicitation
- Bid Scoping & Review
- Cost Estimating
- Cash Flow Projections
- Value Analysis
- Project Management
- Construction Phasing
- Project Scheduling
- Cost Tracking & Management
- Quality Control
- Contract Closeout



Giuffrida Engineering inc.

Engineering, Planning & Designing

Integrity, performance, and client satisfaction

GEi accommodates projects of virtually any size and specializes in complex renovations of existing facilities. Our philosophy for successful project delivery is attention to detail and effective communication. We have forged long-term relationships with our clients through integrity, performance, value, and client satisfaction.

Long history of successful project delivery

GEi has a long history of delivering successful projects working directly for both building owners and architects. Our firm develops excellent design and construction documentation using a team approach. Each project is led by at least one principal engineer who is directly responsible for the project from schematic design through construction completion.

No matter what the project, we begin by listening to our client in order to understand their project needs and how their needs are special. During the schematic design phase, we develop design options for our clients to consider. Each option's merits are clearly communicated so that the client can make informed decisions regarding which works best for them. We strive to keep our clients involved in the decision process every step of the way.

Flexible, innovative solutions

GEi understands that facilities must adapt and evolve to serve ever-changing expectations. This expertise, combined with our understanding of new emerging technologies, allows us to provide our clients with energy efficient, flexible, and innovative solutions to meet tomorrow's needs today.

Engineering Services

- Field Surveys
- Feasibility Studies
- Code Compliance Studies
- Electrical System Studies
- Arc Flash Analysis
- Circuit Breaker Coordination
- HVAC System Studies
- Master Planning
- Building Information Modeling
- Construction Documents
- Construction Administration
- Electrical Distribution
- Emergency/Standby Power
- Uninterruptible Power Systems
- Interior & Exterior Lighting
- Security Systems
- Fire Alarm Systems
- HVAC Systems
- Chiller & Boiler Systems
- Plumbing Systems



Giuffrida Engineering inc.



Commissioning & Retro-Commissioning

Building Commissioning

MEP systems are constantly evolving and growing in complexity, in large part due to increased energy efficiency requirements that drive more precise and granular control of electrical and mechanical equipment. These systems are complicated to install, and they have a high degree of interaction between components that can result in a single operational problem affecting multiple systems. Commissioning new systems prior to occupancy can help to minimize these issues. Often in new construction, building owners or construction managers choose to utilize an independent commissioning agent to ensure impartial performance. GEi can provide commissioning services for our own designs or those of others.

Retro-Commissioning

Retro-Commissioning is, simply, the application of the commissioning process to an existing facility. Over time, building occupancies and uses change, and often the related mechanical and electrical systems are adversely affected by these changes. Over time the combination of minor use changes and simple equipment aging can have a significant negative impact on MEP system performance and efficiency. A typical retro-commissioning effort is a comprehensive process including review of existing system configuration & condition, functional testing, identification and repair of malfunctions, development of recommended system modifications and operational improvements, and implementation & testing of recommendations. Once the efficacy of system modifications has been proven, facility maintenance staff are trained to operate the systems under the new parameters. Retro-Commissioning in this manner can substantially reduce ongoing operating costs for mechanical and electrical systems in existing buildings.



Commissioning Services

- Air Handling Systems
- Chilled Water Systems
- Hot Water Systems
- Steam Systems
- Humidification Systems
- Controls Systems
- Domestic Water Systems
- Electrical Distribution Systems
- Fire Alarm Systems



Giuffrida Engineering inc.



Health Care Engineering

Long term relationships

GEi has been the MEP engineering firm of record for Middlesex Hospital for over 15 years. During that period we have been responsible for over \$100,000,000 of new construction and renovations, helping to modernize a 50+ year old facility that has now been recognized as a Top 100 hospital in the United States. Some of our design efforts in support of the Hospital's improvements include major expansions to house the Emergency Department, Critical Care, Clinical Laboratory, Outpatient Services, and a Cardiac Catheterization lab, complete reconfiguration of the existing 10-room Operating Suite, major upgrades and expansion of the emergency power facility, complete replacement of multiple central chiller plants, expansion of the facility data center and major improvements to its electrical distribution, and complete renovations of multiple patient care floors throughout the facility.

Health Care Engineering Expertise

GEi has a wealth of experience in health care facilities engineering, ranging from simple medical offices to complex state-of-the-art clinical suites. We specialize in complex renovations of existing facilities, and we have the knowledge required to successfully design and implement renovation projects around fully operational clinical programs.

Client Driven

GEi understands that our health care clients' primary focus is patient treatment. This knowledge combined with our understanding of new emerging technologies, allows us to provide our clients with energy efficient, flexible, and innovative solutions to meet the healthcare needs of today and tomorrow.

Engineering Excellence

- Surgical Suites
- Pre-Operative Care Support
- Post-Operative Care Support
- Outpatient Surgery Centers
- Emergency & Trauma Centers
- Radiology Centers
- Women & Children's Centers
- Geriatric Centers
- Hospice & Palliative Care
- In-Patient Psychiatric Units
- Rehabilitation Centers
- Clinical Laboratories
- Pathology Laboratories
- Pharmacy Design
- Physician Office Suites
- Clean Room Design
- Data Centers
- Generators



Giuffrida Engineering inc.



Emergency & Standby Power Systems

Standby Power

Anyone who has experienced a long-term power outage knows what a stressful experience it can be. Concern over food spoilage, lack of running water from your well and no lights or heat can combine to make residential life miserable without reliable power. The stress of a long-term power outage is not limited to homeowners. Most modern businesses rely on electricity for effective operation. Being without lights, computers, or machinery can bring your business to a halt, costing thousands of dollars in lost revenue.

GEi can offer peace of mind through design-build installation of a backup generator for your home or business. We will analyze your electrical needs, select a generator of appropriate size and fuel type, and provide a complete turn-key installation.

Emergency Power

Facilities where loss of power could jeopardize human life or safety, such as health care facilities or places of assembly, are required by building codes to be equipped with Emergency power systems.

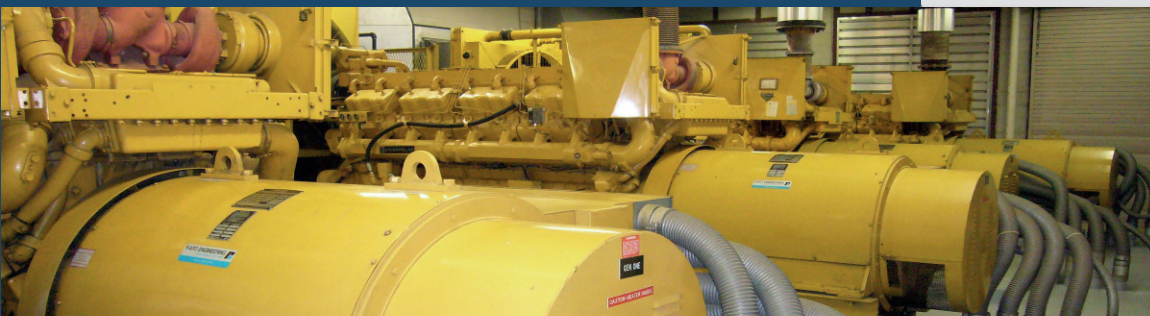
In larger health care facilities, the Emergency power system is required to be subdivided into 2 or 3 subsystems depending on the building type and overall system capacity. Many older facilities do not meet this requirement and find themselves at greater risk for an emergency power system failure due to inadequate load shedding capability.

GEi has a wealth of experience in design, operation, and modification of Emergency systems. We have worked with our clients to modify their existing emergency power systems by reconfiguring distribution, adding transfer switches and/or adding generators to improve reliability, performance, and code compliance.



Emergency/Standby Power Analysis & Design

- Emergency/Standby Power
- Residential Backup Power
- Light Commercial Backup Power
- Uninterruptible Power Systems
- Hospital Emergency Power Systems
- NFPA 110 Compliance Analysis
- Existing System Analysis
- Existing System Modifications



Giuffrida Engineering inc.

Facilities Maintenance & Operational Support

Existing System Diagnosis/Improvement/Replacement

GEi engineers have extensive experience in plant operations and maintenance. We can coordinate with your in-house engineering team to troubleshoot problematic or underperforming systems & equipment, help predict and/or diagnose system failures and develop corrective action plans tailored to your needs. We will work with your maintenance personnel to develop a working knowledge of your existing systems' configuration, review known or expected points of failure, and develop plans for improvement, including documentation for use in bidding and installation. Instead of reacting to equipment failures, allow our engineers to develop a proactive plan to systematically maintain and upgrade your equipment and systems on YOUR schedule.

Essential Systems Testing

Many facilities, particularly healthcare occupancies, are required to conduct documented testing of emergency power, selected HVAC, and various life safety-related detection and alarm systems. GEi has the expertise to design and manage these testing procedures for you. We can analyze your facility to determine what testing is required, develop simple forms for maintenance personnel to document results, tabulate testing data, and produce any reports required by the authority having jurisdiction.

Code Compliance Studies and Personnel Safety

GEi has a thorough knowledge of national, state and local codes governing various occupancies. We can assess existing systems or provide peer review of new designs to ensure that all applicable code requirements are met. We are well versed in electrical systems analysis and can conduct a complete arc flash study on your facility including development of NFPA-mandated labeling to indicate PPE



Facilities Maintenance Support Services

- MEP Systems Reliability Analysis
- Building Pressurization Analysis
- Arc Flash Studies
- Circuit Breaker Coordination
- NFPA 70E Compliance Analysis
- Life Safety Compliance Review
- ADA Compliance Review
- Equipment Testing
- Lighting Level Analysis
- Existing Building Modeling
- Square Footage Reporting



! WARNING	
Arc Flash and Shock Hazard Appropriate PPE Required	
14.3 inch Flash Hazard Boundary 0.82 cal/cm ² Flash Hazard at 18 inches MH-0 PPE Level - Per Chart MH-AF-1	
480 Shock Hazard when Cover is removed	
42 inch Limited Approach	Ref. Chart MH-AF-2
12 inch Restricted Approach -	Use PPE per level above
1 inch Prohibited Approach -	
Equipment Name: EDL-HPG	Date: 3/1/2010



Giuffrida Engineering inc.

Arc Flash & Circuit Breaker Coordination Studies

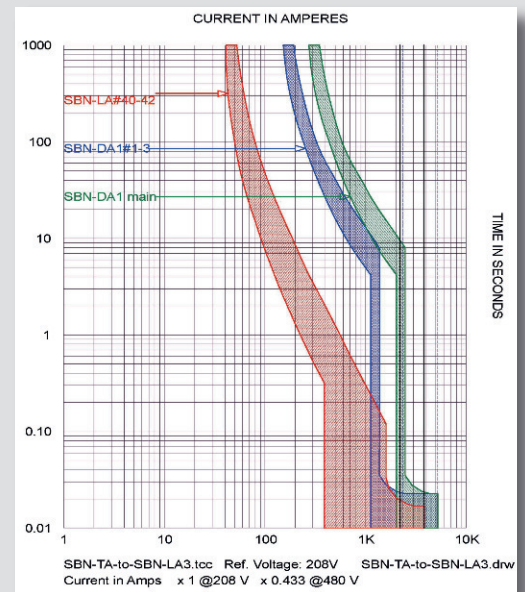
Arc Flash Analysis and Labelling

Commercial, industrial and institutional facilities are now required to comply with regulations governing arc flash energy in their electrical distribution systems. All distribution equipment must be clearly labelled with the calculated arc flash energy available and required personal protective equipment (PPE) for energized work, as well as clear descriptions of the allowable approach distances. GEi has the expertise to perform these studies and develop all required documentation & labelling. In addition GEi will review overcurrent protective device characteristics and settings to determine if modifications would improve personnel safety without materially affecting system reliability.

Selective Coordination

The National Electrical Code requires all legally required standby systems to be selectively coordinated. This process involves a painstaking analysis of the electrical distribution system and trip characteristics of all protective devices to develop settings that will ensure the circuit breaker or fuse closest to an electrical fault will act first, before larger devices upstream trip and cause a more widespread loss of power.

While selective coordination is only required by Code in select situations, any distribution system with multiple protective devices in series should be properly coordinated for maximum safety and reliability. GEi can provide complete coordination studies and trip setting recommendations for existing installations and new construction. For an existing system we will utilize existing documentation in conjunction with a detailed survey of the system to gather the required data. For new construction we will review the construction documents to ensure that the system as designed can be properly coordinated, and recommend settings on all adjustable circuit breakers.



WARNING

Arc Flash and Shock Hazard
Appropriate PPE Required

14.3 inch Flash Hazard Boundary
0.82 cal/cm² Flash Hazard at 18 inches
MH-0 PPE Level - Per Chart MH-AF-1

480 Shock Hazard when Cover is removed

42 inch Limited Approach

12 inch Restricted Approach -

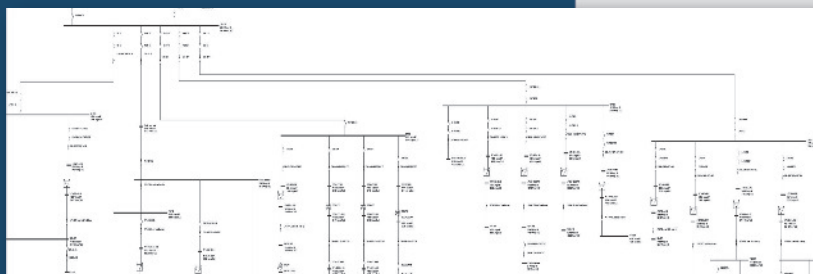
1 inch Prohibited Approach -

Ref. Chart MH-AF-2

Use PPE per level above

Equipment Name: 6SL-4P0

Date: 3/13/2013



Giuffrida Engineering inc.

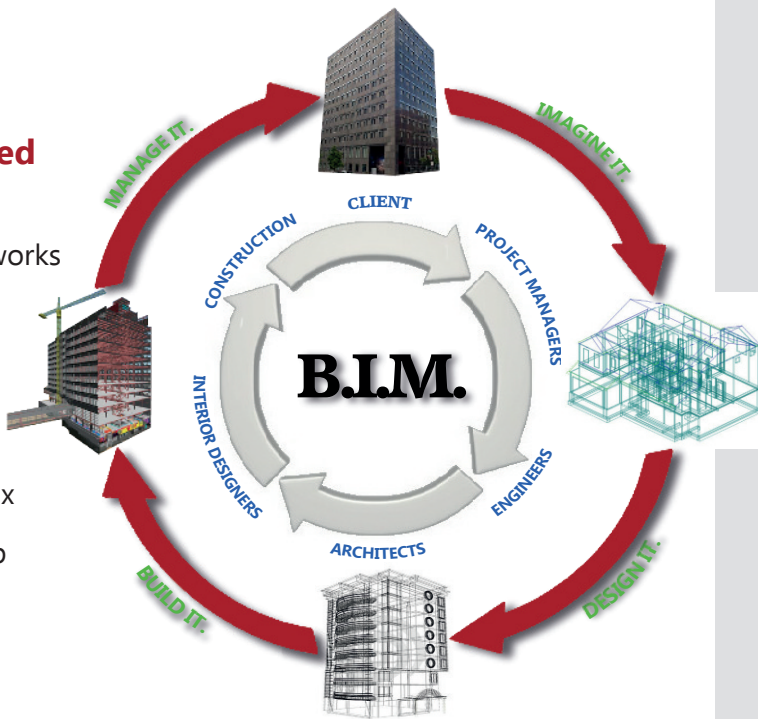
Building Information Modeling

Collaboration and Workflow Improvement

Giuffrida Engineering can improve the productivity and quality of your projects by assisting your company in generating model-based drawings using BIM. Using BIM will also help to increase your company's ability to win more projects. Team members will instantly gain more insight on projects and the communication and collaboration will be greatly enhanced. Once you have a project, Giuffrida Engineering will become your partner in assisting you to generate 3D visualizations such as models and renderings, as well as improving project outcomes with a fewer number of errors.

Software Utilized

- Autodesk Revit
- Autodesk Navisworks
- Autodesk Green Building Studio
- AutoCAD MEP
- Autodesk 3D Max
- Google Sketchup



What is BIM?

Building Information Modeling (BIM) is an intelligent model-based process that provides insight for creating and managing building and infrastructure projects faster, more economically and with less environmental impact. A comprehensive portfolio of solutions for design, visualization, simulation, and collaboration that uses the rich information in the intelligent model to inform better decision-making and break down the barriers to better business..

BIM Advantages

- Win more projects
- Cost Effective
- Increase speed of delivery time
- Higher quality of work
- Reduces amount of errors
- Facilitates collaboration
- Design & Energy Analysis
- Allows team members to gain better insight on projects

BIM PROJECT RENDERING



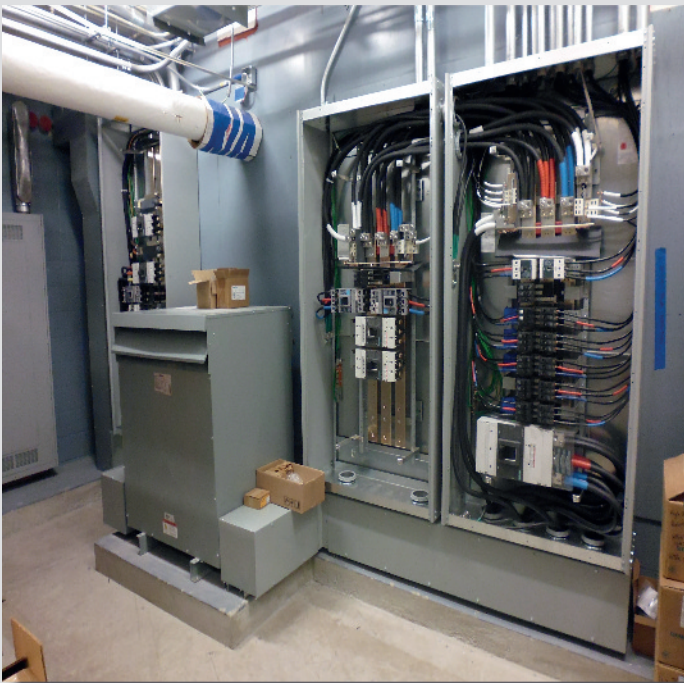
Giuffrida Engineering inc.



Giuffrida Engineering inc.

Selected Experience Record

The following pages represent a select list of projects we have completed for our long-term clients. These have been chosen to reflect the depth and breadth of our experience. Each of these projects has been successfully constructed or is currently under construction. In addition to design packages, GEi was enlisted to provide contract administration services for them as required.





Giuffrida Engineering inc.

Emergency Department

PROJECT COST: \$50,000,000

GEi designed mechanical, electrical, and plumbing systems to support a new 32-bed Emergency Department and future 24-bed Critical & Intermediate Care suite. This project included a central cooling plant, HVAC systems, a new 1,500kW paralleling emergency power plant, normal and emergency power distribution systems, lighting systems, plumbing & fire protection systems, and medical gas systems to support a new 3-story, 90,000 square foot addition, as well as modifications to the existing facility infrastructure to support the addition and renovations of existing spaces. Major modifications to the existing facility's addressable networked fire alarm system were also required, including relocation and expansion of the fire command center.



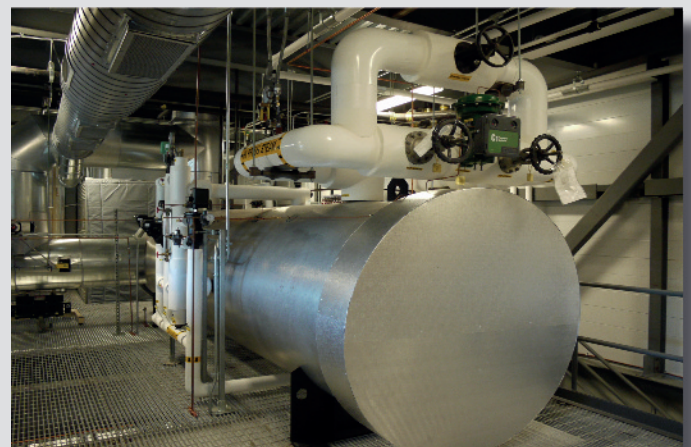


Giuffrida Engineering inc.

Combined Heat & Power Plant

PROJECT COST: \$8,000,000

Middlesex Hospital contracted with GEi to evaluate the economic feasibility of a natural gas-fired combined heat & power (CHP) plant, and based on the study engaged GEi to design a 2 megawatt CHP plant to be constructed on the hospital campus. This facility will be integrated with multiple existing heating, cooling, and electrical systems to provide maximum utilization of available waste heat. The CHP building's location on the existing campus close to property lines required extensive attention to aesthetics and acoustics in order to ensure a successful project. Project design also required extensive coordination with Connecticut Light & Power to replace the existing spot network serving the Hospital with a new service configured for compatibility with distributed generation while retaining the reliability of the existing configuration. Giuffrida Engineering provided full construction management services for this project, including bid solicitation & review, cost tracking and management, coordination of work of all trades, and extensive commissioning.





Giuffrida Engineering inc.

Shoreline Medical Center

PROJECT COST: \$27,800,000

GEi designed mechanical, electrical, and plumbing systems to support a new 60,000 square foot medical building housing a 24-bed, 24 Hour Emergency Clinic and Outpatient Infusion, Radiology, Laboratory, and Women's Imaging suites. This project was constructed under a unique "Design Assist" contract structure wherein the construction contractors partnered with the design team to bring design development documentation to the construction documentation stage. This model was highly successful at reducing change orders during construction via early inter-trade coordination. The building includes hospital-grade HVAC and electrical systems including an 800kW emergency power plant, normal and emergency power distribution systems, lighting systems, plumbing & fire protection systems, and medical gas systems to support the initial 40,000 square foot build-out and 20,000 square feet of shell space for future fit-out.



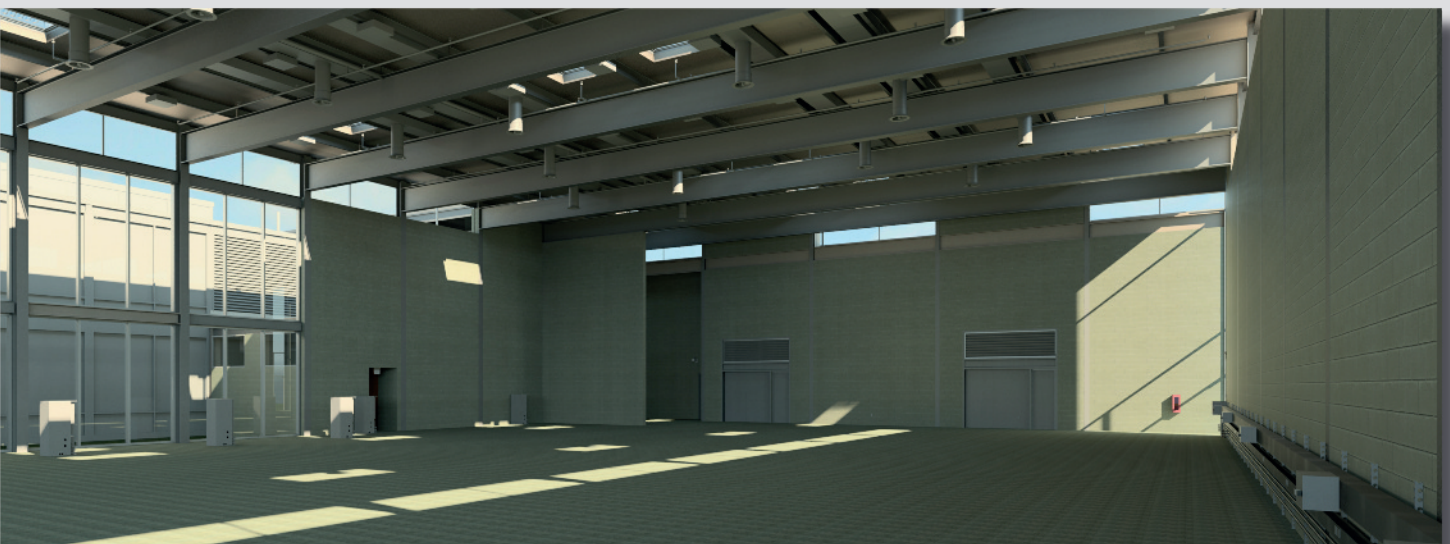
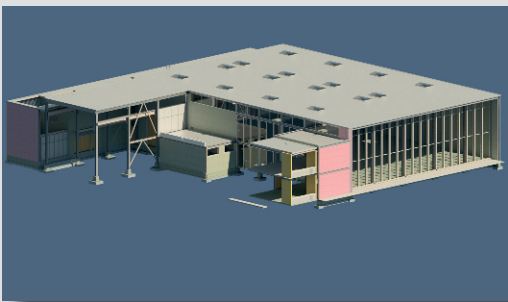


Giuffrida Engineering inc.

Industrial Technology Center

PROJECT COST: \$6,000,000

GEi partnered with Tecton Architects to design an expansion of Trumpf USA's Customer and Technology Center in Farmington, Connecticut. The CATC is Trumpf's showroom in which industrial metal bending & laser cutting equipment is displayed and demonstrated to potential customers. The showroom features a nearly 30-foot ceiling height, with an owner's requirement to integrate mechanical & electrical systems into the roof structure to the maximum extent possible. The project includes relocation of major mechanical & electrical equipment serving the existing showroom & office spaces; new systems were designed to allow construction phasing to minimize down-time in the existing facility. The overall MEP design required painstaking coordination with Tecton Architects, Barkow-Leibinger Architects of Germany, and Trumpf representatives to ensure that the mechanical and electrical systems in the showroom were properly integrated into the architectural vision.





Giuffrida Engineering inc.

Critical Care Unit

PROJECT COST: \$12,000,000

GEi designed mechanical, electrical, and plumbing systems to support construction of a new 24-bed combined Intermediate & Critical Care Unit in unoccupied shell space above the new Emergency Department. This project was designed with close attention to efficiency, reliability & redundancy, with air handling systems designed to allow independent operation of North, West, and East zones for efficient adaptation to changing solar loads, as well as the ability to serve the entire suite with only two operational air handling units. GEi specified a central uninterruptible power supply to serve critical patient monitoring and life support equipment throughout the suite. This project also included installation of the planned 3rd 500kW generator in the Emergency Department's emergency power plant, providing 100% emergency power capacity with n+1 redundancy.





Giuffrida Engineering inc.

Manufacturer Support, Peer Review & Commissioning

COMBINED PROJECT COST: \$15,000,000+

GEi has offered manufacturer support, peer review, and MEP commissioning services to a number of clients over the years. We have provided peer review services and case studies for clients including multiple universities, hospitals, and technology companies. We teamed with Cummins Power Generation and van Zelm Engineers to complete design and documentation of the engine cooling, heat recovery, and control systems for a natural gas-fired campus energy facility. We have partnered with Cummins and their suppliers to develop project-specific construction documentation for numerous genset packages based on manufacturer's standard documents. Clients have engaged GEi to review bid documents for complex electrical and HVAC renovations to verify code compliance, constructability, and performance parameters, and we have provided various levels of MEP commissioning services for owners across a broad spectrum of industries.





Giuffrida Engineering inc.

Operating Suites

COMBINED PROJECT COST: \$20,000,000+

GEi has developed MEP designs for multiple operating rooms across Connecticut, including state-of-the-art robotic surgery rooms as well as traditional rooms. Notably, GEi developed architectural and MEP design documentation to support complete renovation of an active 10-room surgical suite. This project systematically renovated each operating room while retaining the sterile inner core and 9 operating rooms functional around the construction area at all times. This project included specification of new HVAC controls throughout the suite, a new rooftop air handling unit to provide laminar flow air distribution in four of the new rooms, a new clean-steam humidification system to serve the entire suite, and complete replacement of electrical distribution systems serving the suite. GEi also served as Design-Build Constructor for this project, providing close coordination with clinical personnel during construction in this highly sensitive area, tracking and managing construction costs, and coordinating work of all trades throughout the project.





Giuffrida Engineering inc.

Emergency & Standby Power

COMBINED PROJECT COST: \$25,000,000+

GEi has been responsible for well over 15,000kW of emergency power generation for healthcare, commercial, institutional and industrial clients. Our experience ranges from small, single-phase standby generators serving minimal loads, to large paralleling emergency generator facilities serving critical facilities. We have specified paralleling switchboards, designed complete emergency power distribution systems, specified new fuel distribution systems for large paralleling plants, and developed load-shed logic for multiple transfer switches on a single system. GEi has also acted as Design-Build Constructor on many of these projects, providing construction management services, coordinating work of all trades, tracking and managing construction costs, and acting as liaison to owner personnel during construction.



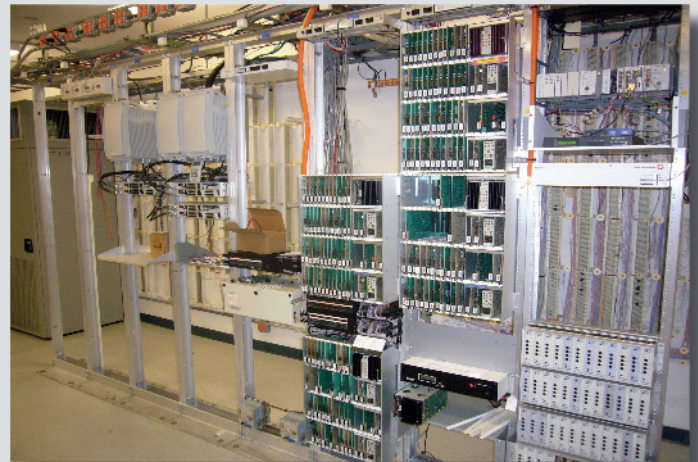


Giuffrida Engineering inc.

Multiple Clients Data Center Upgrades

PROJECT COST: \$9,000,000

Typical Data Center equipment density has grown exponentially over the past few years. GEi worked with the Information Services departments of Northeast Utilities, Middlesex Hospital, Liberty Bank and others to determine current and projected space, power & cooling needs for multiple data centers. GEi subsequently developed new equipment layouts and specified new cooling and UPS systems to support them. Equipment specified under these projects included stand-alone and parallel redundant UPS systems, new electrical distribution, new standby generation, new redundant data center cooling systems, new pre-action fire alarm & sprinkler systems. GEi acted as Design-Build Constructor on some of these projects, providing cost tracking and management, coordinating work of all trades, and acting as liaison to Engineering and Information Services personnel during construction to ensure minimal disruption of critical data center equipment.



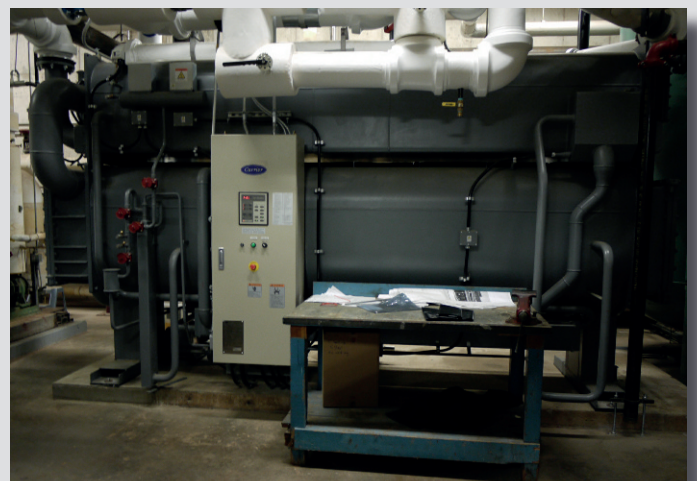


Giuffrida Engineering inc.

Chilled Water & Steam Plant

PROJECT COST: \$6,500,000

GEi specified the replacement of (5) single-stage steam absorption chillers totaling 1,750 tons with (5) two-stage steam absorption chillers of similar capacity for improved efficiency and reliability. The design included major modifications to existing piping, pumping, and controls to supply high pressure steam to the chillers and correct existing issues limiting true operating capacity of the chiller plant. The steam plant was also upgraded with new fuel oil tanks and various upgrades to the steam distribution system. GEi acted as Design-Build Constructor to complete this project under an extremely compressed schedule in order to maintain chilled water availability throughout the cooling season. Chiller removal and installation required painstaking coordination with existing conditions due to extremely limited accessibility to the mechanical spaces.





Giuffrida Engineering inc.

Clinical and Research Laboratories

COMBINED PROJECT COST: \$25,000,000+

GEi has provided mechanical, electrical, and plumbing engineering services for numerous Clinical, Research, and Testing laboratories. These projects often require complex HVAC, electrical and plumbing design to accommodate the stringent requirements of the laboratory environment. We have the expertise to ensure that critical environmental factors are maintained through careful design of air conditioning and exhaust systems. Power distribution may range from simple general purpose receptacles to operate benchtop equipment, to isolated ground and uninterruptible power systems to support critical equipment. Many labs require specially filtered water and specialty waste piping; GEi is well versed in design of all these systems.





Giuffrida Engineering inc.

Radiological Imaging Rooms

COMBINED PROJECT COST: \$50,000,000+

GEi has developed mechanical, electrical, and plumbing construction documents to support state-of-the-art medical imaging equipment for clients across Connecticut. Our experience includes 1.5 and 3T MRI units, CT scanners, PET scanners, Linear Accelerators, Fluoroscopy, and general-purpose imaging. These projects typically involve close coordination with both building owner and equipment manufacturer to ensure that all infrastructure requirements are met. This might include review of electrical feeder capacity and power quality, specification of power conditioning equipment if required, design of new HVAC systems to accommodate the heat load and climate requirements of the new imaging equipment, and specification of high performance dimmable lighting. Ductwork design can be a major challenge in these projects, as existing deck heights are fixed and new equipment nearly always calls for increased ceiling heights. Our 3-D BIM is a major benefit to coordination of all above-ceiling MEP trades.





Giuffrida Engineering inc.

Commercial & Executive Offices

COMBINED PROJECT COST: \$25,000,000+

GEi has worked with many owners and architects to develop MEP designs for office space renovations of all sizes. Ranging from small spaces with just a few private offices to large open-office plans with hundreds of cubicles per floor, we have designed MEP systems for virtually any office configuration imaginable. In addition to the wide variety of sizes and configurations, we are also experienced in many levels of fit-and-finish from the most basic spaces up to executive suites & boardrooms. These spaces have been located in both dedicated and mixed-use buildings, and the MEP requirements have ranged from simple branch circuit and ductwork modifications to full system replacements throughout. We work closely with the owner's IT consultants to ensure that data infrastructure is appropriate to the needs of the space and will support future expansion & technology upgrades.



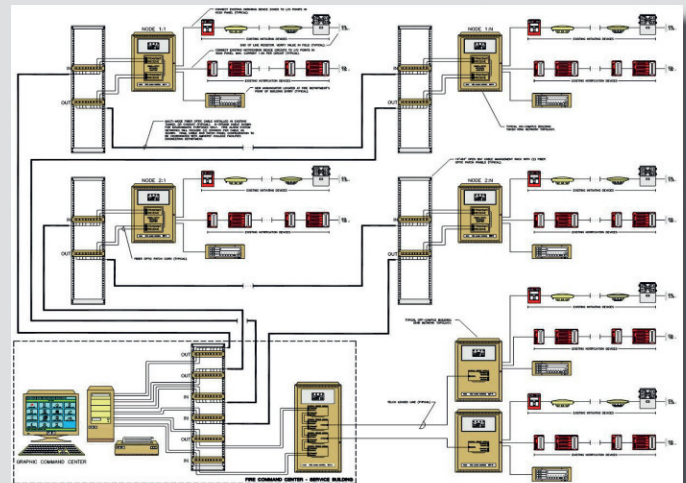
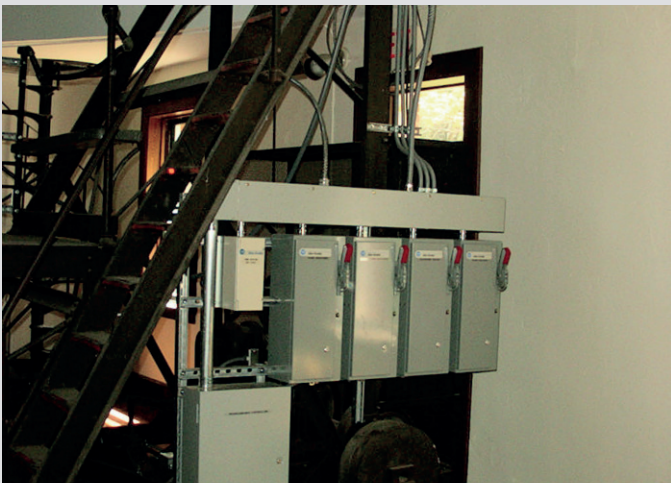


Giuffrida Engineering inc.

Universities

COMBINED PROJECT COST: \$10,000,000+

GEi has partnered with major colleges and universities to provide a variety of design services from feasibility studies to major facility renovations. At Amherst College, we teamed with Tecton Architects to design a comprehensive interior upgrade of the Pratt Swimming Pool facility, including new HVAC systems, all new lighting, a big-screen video scoreboard, and water filtration system upgrades. We worked with Amherst to develop a new control system to bring the antiquated observatory back to full functionality, and provided design services to network all of the campus fire alarm systems together for centralized monitoring. GEi worked with Trinity College to document, test and commission the fire alarm systems in their new residential facilities. At Wesleyan University, GEi designed MEP upgrades to existing photography lab and art gallery spaces, as well as new community rooms and exterior lighting at the on-campus residential buildings.





Giuffrida Engineering inc.

Selected Client List

Bristol Hospital

General Electric

Connecticut Children's Medical Center

Johnson Controls Inc.

Lawrence & Memorial Hospital

Moser Pilon Nelson Architects

Manchester Memorial Hospital

Northeast Nuclear Energy Company

Middlesex Hospital

Northeast Utilities Service Co.

New Milford Hospital

Oddfellows Playhouse

Norwalk Hospital

Pfizer inc.

Rockville General Hospital

Planned Parenthood Southern New England

Hospital of St. Raphael

Real Art Ways

St. Mary's Hospital

Sanofi Pasteur

Hospital of St. Vincent

Schick USA

Windham Hospital

The S/L/A/M Collaborative

American Legion

Tecton Architects

Amherst College

Trinity College

Asnuntuck Community College

Trumpf USA

Bristol-Myers Squibb

Wesleyan University

Cummins Power Generation

Yale University