# MECHANICAL/ELECTRICAL PLUMBING/FIRE PROTECTION ENGINEERING



SILVER/PETRUCELLI+ASSOCIATES
Architects/Engineers/Interior Designers

3190 Whitney Avenue | Hamden CT 06518 203.230.9007 | silverpetrucelli.com info@silverpetrucelli.com

### SILVER/PETRUCELLI+ASSOCIATES Architects / Engineers / Interior Designers

Multi-disciplined staff. Our staff of engineers work side-by-side our in-house architects and interior designers to comprise a staff of 50 professionals.

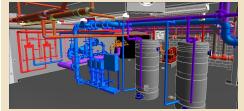
#### Comprehensive engineering services.

Our expertise spans the entire building project's life cycle including:

- ► Mechanical Engineering
- ► Electrical Engineering
- ▶ Plumbing & Fire Protection Engineering
- ► Fire Alarm and Security
- ► Communication System Design
- ► Geothermal System Design
- ▶ Utility Rebate Assistance
- ► Energy Analysis and Audit
- ► Life-Cycle Analysis

Green. Silver / Petrucelli is a member of the United States Green Building Council (USGBC) and has proven LEED, High Performance, geothermal and photovoltaic design solutions that are environmentally responsible and resource efficient.

Award Winning. We are very proud of our recognition for engineering projects including awards from the USGBC, CT Building Congress, Associated Builders and Contractors, United Illuminating, CT Society of Civil Engineers, and the CT Trust for Historic Preservation.



Depth of Experience. Work scopes completed by our engineers include:

- ▶ Heating, ventilation and air conditioning system design
- ► Carbon dioxide testing
- ► Code review & condition surveys
- ► Energy consumption modeling
- ► Exhaust system design and room pressurization
- ▶ Plumbing systems & backflow prevention
- ► Specialty designs (floor drains, holding
- ▶ Power distribution & lighting to ensure adequate exterior lighting & safe interior fixtures
- ▶ Evaluation of surge protection control devices





M/E/P/FP engineering services provided for:

- Mechatronics, metrology, and machine shop labs
- Mechanical and IT rooms
- · Geothermal HVAC Design
- LEED Silver Certified

Quinebaug Valley CC Advanced Manufacturing Technology Center, Danielson, CT; 10,000 s.f.



Engineering services provided:

- Fire suppression system
- Self-adjusting smoke detectors
- Remote annunciator
- Emergency power system
- Natural gas generator installation
- · Lighting systems

Davenport Ridge School, Stamford, CT; 85,000 s.f.









Engineering services provided:

- Steam boiler replacement
- Chiller and cooling tower replacement
- Water treatment equipment installation

Jonathan Law High School, Milford, CT; 250,000 s.f. Joseph Foran High School, Milford, CT; 300,000 s.f.



Engineering services provided:

- Lighting controls
- Emergency power systems
- Security systems
- Ground fault protection systems

Crown Street Garage, New Haven, CT



Engineering services provided:

- Cameras and access doors
- Telephone entry system
- Wireless IP network infrastructure

Redevelopment & Housing Partnership, Milford, CT; 10 public housing complexes

## SILVER/PETRUCELLI+ASSOCIATES Architects / Engineers / Interior Designers







Engineering services provided:

- Pump system (10 million gallons/day)
- Water clarifying equipment
- · Utility building and booster housing design
- 2011 Water Resource/Environmental ACE Award recipient

Kleen Energy, Middletown, CT; 620 mW power generating facility



Engineering services provided:

- Electrical service design
- Pole mounted luminaries
- Bollard style luminaries







Engineering services provided:

- VAV rooftop air handling units
- Central boiler plant
- · Water-cooled centrifugal chiller & cooling tower
- · Humidification of clean room environment
- Energy management system coordination with National Grid

Rochester Electronics, Newburyport, MA



Engineering services provided:

Burnham School, Bridgewater, CT

- Underground storage tank removal/replacement
- Content transfer
- Electronic monitoring and gauging system
- Fuel oil transfer pump







Engineering services provided:

- Chemical exhaust system improvements @ Bronwell Engineering Building
- HVAC system, piping, and electrical systems for teaching labs @ Torrey Life Sciences Building
- Radiation shielding for CT Simulator Suite @ UCONN Health Center

On-Call Mechanical & Electrical Services, University of Connecticut



Engineering services provided:

- · Athletic field lighting
- Power systems for irrigation system
- Power systems for scoreboards
- Electrical power to the field

### SUSTAINABLE ENGINEERING CONCEPTS

AEGIS

S\*LRENVIEW







132 vertical bores and earth loop headers (*left*) comprise the geothermal system (*center*) @ Chatfield-LoPresti School in Seymour and ceiling mounted active chilled beam technology @ Berlin High School (*right*).



Rainwater harvesting for re-use and vehicle washing @ Fire Headquarters in Branford.



Electric Vehicle (EV) charging stations for Park New Haven parking garages.



Electronic device charging stations at the Union Station Transportation Center in New Haven give commuters a place to recharge on the upper level of this historic and busy mass transit terminal.



Solar photovoltaic panels for electricity and hot water @ Fire House #5 in East Hartford, a LEED™ Gold facility.



A 58-ton closed loop geothermal system was designed for Fire Headquarters in Branford.



SOLECTRIA



Environmental systems at Fire Headquarters in Branford can be monitored by staff online (above) to help calculate the impact on their environmental footprint. Branford is a LEED™ Silver facility.

#### SPECIALTY DESIGNS

- ► Tailpipe Exhaust
- ▶ Oil Separation
- ▶ Dust Collection
- ► Compressed Air
- ▶ Kitchen Ventilation
- ► Grease Interceptor
- ▶ Paint Spray Booths
- ▶ Welding/Soldering Exhaust
- ► Vehicle Wash











