

Sellinger Associates, Inc.

Consulting Engineers

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SELLINGER ASSOCIATES, Inc.
Consulting Engineers

Bringing award winning engineering solutions to the Detroit area since 1996

Company Overview



Established 1996
Livonia MI

Michael O. Sellinger
President

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sa@sellingerinc.com

Steven J. Benaske
V. President

Sellinger Associates, Inc. is a Michigan based, Mechanical Engineering Consulting firm, established in 1996, by Michael O. Sellinger, P.E. Prior to establishing Sellinger Associates, Mr. Sellinger worked as a project manager and project engineer at various consulting firms in the Metro Detroit area. Sellinger Associates obtained certification as a member of the Michigan Minority Business Development Council in January of 1999, and is currently certified by the MMBDC. Our company strives to promote minority involvement in the Consulting Engineering profession.

The staff at Sellinger Associates, Inc. is dedicated to providing our clients with the finest engineering services available. We offer superior design solutions that are sensitive to budget issues and building aesthetics. We are experienced in LEED design criteria, having designed the first Public Library and the first Bank in Michigan to receive Silver Rating. We designed one of a few manufacturing facilities in the country to receive LEED Gold Rating and we've commissioned a number of LEED projects to date. We strive to continually enhance our technical knowledge and capabilities in order to provide innovative, state of the art, cost effective designs. As a firm, we design to a budget, doing our own cost estimating, utilizing an excellent cost estimating data base.

Our staff of Professional Engineers, Designers and CAD personnel brings a wealth of experience to every project we design.

Drawings are produced with the latest computer equipment, utilizing current software, including AutoCAD 2010 and REVIT. Our engineers and CAD designers have the experience, enthusiasm and talent required to make each project a success.

Sellinger Associates, Inc. has designed a number of award winning projects, including The Dime Building in Detroit, Barton Malow Headquarters in Southfield, Tabernacle Missionary Baptist Church in Detroit, and the ACCO Headquarters in Warren.

Design Services

- HVAC DESIGN, NEW AND RENOVATED BUILDINGS
- HEALTH CARE SYSTEMS DESIGN
- PLUMBING & PIPING DESIGN, NEW AND RENOVATED BUILDINGS
- MECHANICAL SYSTEMS FEASIBILITY STUDIES
- MECHANICAL BUILDING CODE COMPLIANCE
- MECHANICAL SYSTEMS TROUBLESHOOTING
- FIRE PROTECTION SYSTEM DESIGN
- MECHANICAL CONSTRUCTION COST ESTIMATING
- BUILDING MOISTURE MIGRATION ANALYSIS
- LEED EXPERTISE
- GEOTHERMAL DESIGN EXPERIENCE
- COMMISSIONING
- BIM DESIGN

MICHAEL O. SELLINGER, P.E. President



Wayne County Community College



Barton Malow Headquarters



Township Hall, Plymouth MI



Harper Woods Public Library

Education

Lawrence Institute of Technology, Southfield, Michigan; Bachelor of Science in Mechanical Engineering, 1987

Licensure

Professional Engineer – States of Michigan, Florida, Georgia, Indiana, North and South Carolina, Ohio, Pennsylvania, Tennessee, Washington D.C.

Qualified Commissioning Process Provider (QCxP),

Professional Memberships

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

Building Commissioning Association (BxA)

National Fire Protection Association (NFPA)

Background

Over twenty-five years of experience in Mechanical Engineering. Employed as Project Engineer and Project Manager at various A/E firms in Metro Detroit, prior to establishing Sellinger Associates. Mr. Sellinger oversees project engineering and management, client relationships and administration.

Project Experience

Wayne County Community College – Taylor, MI

New 50,000 s.f. Multi-Purpose Education Facility including a 500-seat performance arts auditorium, classrooms, student dining and administrative areas. Renovations to the existing facility consist of 40,000 s.f. and include a kitchen, classrooms and administrative space.

Barton Malow Headquarters Building – Southfield, MI

New state of the art 110,000 s.f. 4-story office building including exposed mechanical systems and an innovative smoke control system designed for the central Atrium.

Township Hall, Police Facility & Fire Station – Plymouth, MI

Mechanical systems design for 2-story, 52,000 s.f. Township Hall, including public and administrative areas, computer room, lunch room and toilet rooms. Design of systems in Police and Fire Station include public and administrative areas, communication and holding areas, detention cells, shower rooms, evidence storage and a 3-bay drive-thru apparatus area.

Harper Woods Public Library – Harper Woods, MI

Renovations/additions to existing 1-story library with basement. The first library in Michigan to attain silver LEED certification.

STEVEN J. BENASKE, P.E.
Vice President

Education

Saginaw Valley State University - Bachelor of Science in Mechanical Engineering

Licensure

Professional Engineer - State of Michigan, October, 2001

Professional Memberships

American Society of Heating, Refrigerating & Air Conditioning Engineers (ASHRAE)
National Society of Professional Engineers (NSPE) American Society of Plumbing Engineers (ASPE)

Background

Mr. Benaske has extensive experience in HVAC systems. He is involved with system evaluation, project design, development of specifications and selection of equipment. Steve acts as project manager and project engineer.

Project Experience

Salvation Army Adult Rehabilitation Center – Detroit, MI
Complete renovation of existing 328,000 s.f., 6-story facility, including new HVAC and plumbing systems. Renovated areas include residential, administrative, recreational and counseling spaces, as well as a chapel, kitchen, dining room and warehouse space. This project was completed in phases so that occupants could remain during construction.

Northville Public Schools – Northville, MI

Additions, renovations and HVAC upgrades to six elementary schools and two middle schools including:

200,000 s.f. of Elementary Schools:

Amerman, Moraine, Silver Springs, Thornton Creek, Ridge Wood, Winchester

287,000 sq. ft., of middle schools:

Hillside, Meads Mill

State of MI Detroit Transportation Campus – Detroit, MI

New 50,000 s.f., 2-story multi-use facility including an operations center, server room, office and conference rooms, emergency meeting rooms and toilet rooms. The building incorporates energy conservation methods, including DDC controls, energy recovery HVAC units, demand control ventilation and VAV systems.



Almont Township Fire House

NAUM POPOVSKI
Mechanical Designer

Education

Wayne State University, Detroit, Michigan; Bachelor of Science in Mechanical Engineering Technology, 2008

Schoolcraft College, Livonia, Michigan; Associates of Applied Science in Mechanical Design, 2004

Background

Mr. Popovski has over sixteen years' experience in HVAC and Plumbing systems for the building design and construction profession. Including system evaluation, project design/layout, development of project specifications, selection of equipment, commissioning services and interface with clients.

Project Experience

Angela Hospice – Livonia, MI

Renovation to 20,500 s.f. existing and 49,600 s.f. of new addition, including administration area, patient rooms, kitchen, and chapel.

Aramco Detroit R & D Center – Novi, MI

Fundamental and enhanced commissioning to obtain LEED NC 2009 certification. The building is totally renovated, one-story with mezzanine R & D facility. Includes engine & chassis dynamometers, chemistry labs and office space. Commissioned systems include HVAC, controls, domestic hot water, lighting and day-lighting controls, cooling, exhaust and make-up systems concerning the dynamometers and renewable energy systems

ZF Octagon-Design Build – South Carolina

Preparation of design build sketches, specifications and narrative for 1,100,000 s.f. manufacturing facility. Includes warehouse, office space, cafeteria and lockers. The prepared documents will provide mechanical, plumbing & fire protection contractors with specific information related to project in order to procure bids equal in standards & quality of systems.

FDA Expansion Stroh River Place – Detroit, MI

Office expansion for the FDA-Detroit, including approximately 6,000 square feet on the sixth floor and 2,000 square feet on the fifth floor. Includes a Sterilizer Room and a Balance Room.

C.A.D.D.

Sellinger Associates, Inc. is equipped with state of the art computer equipment and software, allowing us to provide excellent AutoCAD capabilities to our clients. Our designers are familiar with AutoCAD Versions 2000, 2006, 2009 and 2010. Staff designers and engineers are well versed in BIM using Autodesk REVIT MEP 2010. We work seamlessly with the design team to produce coordinated 3D drawings.

Sellinger Associates has established an AutoCad protocol for each client enabling the transfer of information to occur seamlessly.

SUPPORT STAFF

Jose Cabello
Zachary Wiacek
Bennie Disney
Lisa C. Sellinger

Engineer
AutoCad Designer
AutoCad Operator
Business Manager



Fort Pickett RTI

PROJECT EXPERIENCE

The following are brief descriptions of projects designed by Sellinger Associates:

Health Care:

U of M Hospital Centralize Instrument Processing Expansion

Design of Mechanical and Plumbing systems for CIP expansion. Includes a centralized sterile area, decontamination area, instrument storage, shower & locker rooms, as well as steam sterilization equipment

Chelsea Community Hospital Medical Office Bldg. – Chelsea, MI

New 60,000 s.f. building including pain/endoscopy suite, diagnostic imaging, women's health, back care, etc.

Detroit Medical Center, Children's Hospital – Detroit, MI

Renovation and expansion to Pharmacology/Toxicology Clinic. 18,500 s.f. includes laboratory and office areas, patient rooms and support space.

Allegan Hospital - Allegan, MI

Design of HVAC, plumbing, fire protection and temperature controls for a total of 32,000 s.f. for emergency addition and hospital renovation.

Kalkaska Memorial Health Center - Kalkaska, MI

40,000 s.f. addition and renovation, including administrative offices, urgent care, long term care, dining room, exercise rooms, exam and diagnostic labs.

Shriner's Hospital, Spokane, WA

Renovation of existing hospital and addition of suspended (floor exposed) conference room. Renovation of patient rooms adjacent to hospital, 6,000 s.f.

Shriner's Hospital for Children - Erie, PA

60,000 s.f. addition, including administrative offices, patient rooms, family sleep quarters, procedure and exam rooms.

Shriner's Hospital for Children – Erie, PA

Mechanical HVAC portion for 60,000 s.f addition, including administrative offices, patient rooms, operating rooms, post-op and pre-op, procedure and exam rooms.

PROJECT EXPERIENCE

Health Care:

Mt. Clemens General Hospital - Mt. Clemens, MI

Radiology Suite HVAC Upgrade:

Design of new HVAC system for 10,000 s.f. radiology suite. Project was phased so that 4 of 8 radiology rooms were useable at all times during construction.

Central Energy Plant Study/Report and Plant Addition:

Evaluation of 300,000 s.f. hospital campus to determine most effective Central Energy Plant system.

Addition of new 4,000 s.f. Central Energy Plant to house heating and cooling equipment for existing and proposed hospital complex. This plant includes two 700 ton chillers, primary and secondary pumps, DDC control system, low temperature glycol loop, four 100 psig steam boilers and a 3,500 ton-hour ice storage system which results in energy savings of \$60,000 per year.

Retirement / Assisted Living / Nursing Care Facilities:

MediLodge – Port Huron, MI

Mechanical systems design for new 82,000 s.f. skilled nursing facility with approximately 120 patient rooms. Design of kitchen systems and HVAC systems in therapy, administrative, and laundry areas. A resistance pool and hot tub, dining room and other common spaces are included as well. This project was phased into 4 separate projects.

Angela Hospice – Livonia, MI

Design of all Mechanical systems for new 42,250 s.f. addition and 19,340 s.f. renovation of existing facility. Includes design of kitchen systems.

Marywood Nursing Care Center – Livonia, MI

Upgrades to existing HVAC system include rooftop and PTAC units in each room. Bathroom renovations in all patient rooms. 18,000 s.f. additions include a Chapel, dining, therapy and lounge areas.

Project Experience

Retirement / Assisted Living / Nursing Care Facilities:

Woodhaven Retirement Community – Livonia, MI

Design of all Mechanical systems for 19,000 s.f. addition to existing one-story facility. Includes 24 units, an activity room, vestibule area, lounge, laundry and other ancillary spaces.

Bay Shores Nursing Care Center – Bangor Township, MI

Design of Mechanical systems for two major additions: 22,629 s.f. patient wing including patient rooms, common and administrative areas, dining and activity rooms, and wellness center. New 7,100 s.f. “back of the house” addition includes a kitchen, dining room, laundry, storage and mechanical room.

Northville Comm. Rec. Center for the Elderly – Northville, MI

10,000 s.f. addition, including activity rooms, multi-purpose room, offices and kitchen. Renovations include replacement of unit ventilators, fin tube radiation, cabinet heaters, piping and pumps. The plumbing was also replaced.

Ford Senior Center, Phases I and II – Taylor, MI

Phases I and II – Renovations to existing facility including new HVAC system with modifications to a greenhouse and kitchen. Addition to facility includes providing new HVAC system, as well as a multi-purpose room, conservatory and computer room.

Kalkaska Health Center – Kalkaska, MI

Addition and renovation including administrative offices, urgent care, long term care, dining room, exercise rooms, exam and diagnostic labs. 40,000 s.f.

Mid-Rise Residential Facilities:

Fort Pickett Regional Training Institute – Blackstone, VA

Mechanical systems design for three new 40,000 s.f. 2-story armybilleting buildings with one- and two-bedroom residential units, designed to LEED standards. This is a full BIM project including Revit 3D modeling and clash detection coordination between all trades.

Project Experience

Mid-Rise Residential Facilities:

Salvation Army Adult Rehabilitation Center – Detroit, MI

Complete renovation to existing six-story facility, including new HVAC and plumbing systems. Areas renovated include residential, administrative, recreational, and counseling spaces, as well as a chapel, kitchen, dining room and warehouse space. This project was completed in phases so that residents could remain during construction.

Bethel Tower – Detroit, MI

Renovations to an eight-story high rise building and four two-story townhouses. Renovations involved replacing the boiler system, make-up air unit, a portion of the domestic water piping and the domestic water heater and repairs to the fan coil units. In the townhouses all plumbing fixtures, furnaces and hot water heaters were replaced.

Data Centers / Computer Rooms:

Comerica Bank Data Center – Auburn Hills, MI

Analysis of existing 20,000 s.f. Data Center, to determine the best solution for upgrading and redundancy addition. Preparation of Design Build drawings to address all engineering design and technical support services needed.

Frontier Communications – Minneapolis, MN, Washington, D.C., Cleveland, OH and Atlanta, GA

Design of HVAC, plumbing, fire protection and temperature controls for 10,000 s.f. long distance telephone switchgear sites. Design included 750 KW emergency generator.

Dodge Hall Data Center – Oakland University – Rochester, MI

Provided Mechanical, Electrical, Structural and Architectural services for upgrade of existing Data Center at Dodge Hall on the Oakland University Campus.

Commercial:

Barton Malow Headquarters Building – Southfield, MI

New state of the art 110,000 s.f. four story office building including exposed mechanical systems. The Atrium was provided with an innovative smoke control system design.

Project Experience

Commercial:

First National Bank – Detroit, MI

Designed five floors of interior space in existing high-rise, while occupants remained in building. Project was phased to allow occupants to relocate during construction. Renovation included 25 self-contained air handling units, VAV boxes and controls.

State of Michigan Detroit Transportation Campus – Detroit, MI

New 2-story, 50,000 s.f., multi-use building. This building incorporates energy conservation methods including DDC controls, energy recovery HVAC units, demand control ventilation and VAV systems.

ACCO Systems, Inc. B Warren, MI

New 2 story, 40,000 s.f. office building. Design of complete HVAC system including roof top units, variable volume boxes & heating hot water boilers serving finned tube radiators and tempering coils.

DIME Building - Detroit, MI

Renovations of all mechanical systems for a 23-story landmark building in Detroit. Approximate s.f. is 360,000. The existing steam and condensate system was re-used for the lower floors.

Industrial:

ZF Octagon-Design Build – South Carolina

Design build sketches, specifications and narrative for 1,100,000 s.f. manufacturing facility, including warehouse, office space, cafeteria and lockers. The prepared documents provided contractors with specific information relevant to the project in order to procure bids equal in standards & quality of systems.

Behr America Research and Design Center B Troy, MI

Design of the Plumbing & HVAC systems for a new 80,000 s.f. office/lab building; including administrative spaces and test lab area for various dynamometers. Separate on site 25,000 s.f. full scale Atruck® wind tunnel building; including vehicle test area, mechanical rooms, soak rooms, isolation chambers, vehicle exhaust systems, & lab waste system.

Project Experience

Industrial:

NSK Corporation – Ann Arbor, MI

New 110,000 s.f. Corporate Headquarters and research and testing facility.

Chrysler Motors – Detroit, MI

Design of new chilled water plant for existing 200,000 s.f. UAW Training facility. Includes new plumbing and air distribution system for 100,000 s.f. office space.

KEIHIN Building – Capac, MI

HVAC design for the manufacturing and administrative areas of a new, 110,000 s.f. manufacturing facility. Plumbing design includes typical domestic water systems, sanitary systems, storm systems, as well as compressed air and natural gas systems.

Detroit Edison Warren Service Center Upgrade – Detroit, MI

Design build specifications and drawings for 85,000 s.f. renovation, including laboratory, testing and office space.

GM-NATP Dining / Kitchen Facility

Design of new dining / kitchen facility including 50,000 s.f. dining area and 8,000 s.f. kitchen. Design included air conditioning units, make up air units and exhaust fans exhausting 35,000 cfm. This facility is the largest dining / kitchen facility in Michigan.

Bing Steel – Detroit, MI

70,000 s.f. Industrial building addition. HVAC design using gas fired H&V units, self-contained DX air handler and compressed air system.

Chrysler Corporation, LLC – CPG, Chelsea, MI

Various Laboratory projects including:

CPG, Impact Building 115 – Boiler System Replacement.

Provide design and construction documents for a complete boiler system replacement in the Impact Building #115. Consists of demolition of boiler and pumps, Relocate the 400 MBH boiler, provide four new boilers (high efficiency) along with new primary-secondary pumping arrangement. The pipe distribution system shall be removed and replaced. Project shall include (1) cost estimate, field work for boiler system, and meetings.

Project Experience

Industrial:

CPG, Building 205, Grounds Maintenance

Provide design and construction documents for a new 7,370 s.f. Grounds Maintenance addition, to an existing building.

- Wind Tunnel Control Room - HVAC study
- Grounds Maintenance Break Room
- Impact Building – Domestic Water Replacement

Wallingford Energy Engineering – Wallingford, CT

Two new one-story buildings approx. 13,700 s.f. Consisting of plant operations building and gas compressor building.

Educational:

Higher Education

Chrysler - WCM Academy Renovation (various projects)

BP#1 WCM and Training Rooms, 28,700 sf total. Remove and replace ductwork on two RTU's, modify and add VAV boxes, approximately 14 total and modify diffusers and grilles.

BP#2 Corridors, Lobby, Rotunda, 10,500 sf total. Provide new aesthetic, supply and return grilles.

Phase 2: Renovate and reconfigure existing WCMA and TTC lab, renovate classrooms, establish new LCA lab and Robot Cell. The approximate area of mechanical work is 16,000 sf.

Phase 3: Renovate all corridors, stairs and common areas, approximately 10 toilet rooms, (not renovated in phase 1), mezzanine area. Renovate cafeteria, meeting, dining and serving areas. The approximate area of mechanical work is 35,000 sf.

Wayne State University – Detroit, MI (various projects)

- Science Hall – Make-Up Air System Upgrade
Converted 40 chemistry fume hoods to variable volume types and designed an energy saving variable volume exhaust and make-up-air system.
- Engineering Building – Test Cell Fire Suppression System
Designed new low pressure central CO₂ fire suppression system serving 5 engine dynamometer rooms. Phasing of the project was critical in order to maintain engine testing throughout the construction period.

Project Experience

Educational:

- **Boiler System Safety Relief Valve Upgrades**
Investigation and performance criteria design for boiler safety relief valve replacement and conformance to ASHRAE B3.1 power piping code. Code violations were identified in over 130 locations in various WSU buildings.

University of Detroit Mercy – Detroit, MI (studies)

- **Comprehensive Technical Energy Analysis: Thermal Energy Plant**
Energy analysis conducted on the heating and cooling systems for the U of D Mercy, McNichols campus, which serves 1.15 million s.f. Results of the study revealed 17 energy saving measures (ecm's) including new blow-down heat recovery systems and VFD's for cooling tower fans.
- **Comprehensive ASHRAE Level II Energy Efficiency Analysis: Engineering Building**
Assisted with preparation to perform a comprehensive evaluation of the U of D Engineering Hall on the Mercy Campus. 25 energy-conserving measures were detailed as a result of the study.

Eastern Michigan University - Ypsilanti, MI

Design of all Mechanical systems for new, four-story, 70,000 s.f. state of the art Health and Human Services Building.

Eastern Michigan University - Ypsilanti, MI

Sheet metal, plumbing, and fire protection design for 33,000 s.f. Boone Hall renovation.

Wayne County Community College – Taylor, MI

New, 50,000 s.f. Multi-Purpose Education Facility which includes a 500-seat performance arts auditorium, classrooms, student dining and administrative areas. Renovations to the existing facility consist of 40,000 s.f. and includes a kitchen, classrooms and administrative space. Total project size: 90,000 s.f.

Project Experience

Educational:

Oakland University – Rochester, MI

Analysis of existing fuel back-up system in the Central Heating Plant to determine viable options for renovating and placing the system into operation.

Oakland Community College - Auburn Hills, Farmington Hills, MI

12,000 s.f of mechanical revisions to existing system to accommodate new computer workstations.

Romeo Schools – Romeo, MI

Design of new, completely air-conditioned facility. Includes vocational and educational classrooms (computer labs, culinary classrooms, machine/wood shop) and administrative areas of approximately 89,000 s.f.

K-12

New Haven Middle School – New Haven, Michigan

Total design of HVAC system for new 117,000 s.f. Middle School, encompassing two levels and including air-cooled chillers, hydronic heat systems, air-handling units, fan powered and VAV boxes. Design of HVAC and exhaust systems for kitchen/cafeteria area.

Northville Public Schools Bond Program – Northville, Michigan, Various Projects:

Transportation Facility - Designed new 19,000 s.f. facility including three service bays, bus wash, parts storage, drivers lounge, vehicle storage, mezzanine and athletic equipment storage. Demolition of 10,000 s.f. facility .

High School Gymnasium - Design of new gymnasium, fitness center, outbuilding, concession building and renovation work to adjacent existing spaces, totaling 40,000 s.f.

Northville Public Schools - HVAC Upgrade - Addition, renovation and HVAC upgrades to six elementary and two middle schools.

Project Experience

Educational:

K-12

Brightmoor Academy - Novi, MI

Design of all mechanical systems for 100,000 s.f. new religious educational facility, including gymnasium, auditorium, classrooms, food service areas, and administrative spaces.

Everest Academy – Clarkston, MI

New 58,000 s.f. Preschool and admin. building. System design of chilled water plant, hydronic heating, snowmelt system, cooling towers and refrigeration purge.

Everest Academy Phase 2 - Clarkston, MI

Designed mechanical systems for 40,000 s.f. addition including 30 classrooms, lobby and administrative areas.

Everest Academy Phase 3 - Clarkston, MI

Mechanical system design for 40,000 s.f. addition including 30 classrooms, toilet rooms, media center and administrative areas.

Everest Academy - Clarkston, MI

Design of central power plant for campus facilities. Included central water-cooled chillers and heating hot water boilers.

Religious Facilities:

ETS – Master Plan – Phase 1

Schematic documents for 40,000 s.f. total renovation to an existing religious facility and 20,000 s.f. addition.

Ahmadiya Mosque – Rochester Hills, MI

Design build of new 19,000 s.f. mosque, including narrative, outline specs and conceptual drawing showing main systems.

St. Mary's Church - Wayne, MI

New 20,000 s.f. addition including gymnasium, classrooms and assembly area.

Tabernacle Missionary Baptist Church – Detroit, MI

New 97,000 s.f. facility, including 24,000 Sanctuary, educational, administrative and kitchen/banquet areas.

Project Experience

Municipal:

State of Michigan – Detroit Transportation Campus

New 50,000 s.f., 2-story multi-use facility including an operations center, server room, office and conference rooms, emergency meeting rooms and toilet rooms. The building incorporates energy conservation methods, including DDC controls, energy recovery HVAC units, demand control ventilation and VAV systems.

Township Hall, Police Facility & Fire Station – Plymouth Township, MI

Mechanical systems design for new 2-story, 52,000 s.f. facility, including public and administrative areas, computer room, lunch room and toilet rooms. Systems design in Police / Fire Station include public and administrative areas, communication and holding areas, detention cells, shower rooms, evidence storage and a 3-bay drive-thru apparatus area.

Downtown Flint Transit Authority – Flint, MI

HVAC and Plumbing design for major renovation of existing 17,200 s.f. transportation facility.

Taylor Fire Station & Courthouse – Taylor, MI

Schematic design and design build criteria for 37,000 s.f. courthouse and 30,000 s.f. fire station.

Troy Fire & Police Station – Troy, MI

Mechanical systems design for new 63,900 s.f. addition and renovation to existing buildings.

Waterford Fire Station & Police Department – Waterford, MI

Design of new 25,000 s.f. fire station, includes training room, sleep areas, apparatus bays and 55,000 s.f. Police Headquarters.

Novi Indoor Gun Range – Novi, MI

Design of new 6,750 s.f. indoor gun range, includes ammunition storage, toilet rooms, controls and mechanical room, armorer's room, and 25-yard long, eight-lane gun range. Recirculation system includes specification of systems to keep contaminants out of the breathing zone, provisions for laminar flow around shooter, and compliance with all NIOSH, OSHA and EPA Codes and Standards.

Project Experience

LEED:

RayConnect – Auburn Hills, MI

This 65,000 s.f. manufacturing facility houses injection mold equipment which produces quick connect fittings for the automotive industry. The facilities energy usage is dominated by the electrical requirements for the injection mold equipment. The owner elected to purchase expensive energy efficient electric equipment in lieu of the traditional hydraulic equipment. This decision resulted in great utility cost savings. Through the CIR USGBC process SAI solicited a favorable response allowing the equipment to be included in the energy cost savings of the facility. This resulted in 8 points for the EA Credit 1, and achieved LEED Gold rating.

Smart Car Headquarters – Bloomfield Hills, MI

Renovation of former dealership into training facility. 8,000 s.f. required minor HVAC modifications. 10,000 s.f. necessitated a new HVAC system as well as some plumbing modifications. This project is to be LEED-CI.

Ferndale Public Library – Ferndale, MI

This project involves a total refurbishment of the existing library and additions of 6,800 s.f. The library will be certified LEED Silver and comprise approximately 20,000 s.f. Extraordinary features include a geothermal heat pump system, energy recovery units, DDC controls, day lighting, low-flow plumbing fixtures, a storm reclamation system providing grey water and irrigation water.

JPra Architects Office Building – Farmington Hills, MI

Mechanical system design for new two-story office building. Includes design of energy efficient and LEED compliant HVAC and Plumbing systems. All calculations and documentation required by USGBC for LEED certification, were provided by Sellinger Associates. This project was designed to meet “Silver” LEED specifications.

Harper Woods Public Library – Harper Woods, MI

Renovations and additions to existing one-story library with basement. This building is now LEED certified. The HVAC system does not contain CFC's or HFC's and the furnaces are high efficiency type. CO₂ monitoring is employed and the water closets are dual-flush type.

Project Experience

LEED:

The Affirmation Community Center – Ferndale, MI

Construction of a new 3-story, plus basement, Community Center. The building consists of administrative space, a media center, game room, lobby, commercial type kitchen, multi-purpose rooms and other ancillary spaces. The facility is LEED accredited, with energy efficient heat pump HVAC system design. Plumbing credits include low-flush water closets and waterless urinals. Also incorporating 7500 gallon grey water system for non-potable irrigation & water closets. In addition, the building includes a 3-floor atrium which requires special smoke management systems.

COMMISSIONING:

RayConnect – Auburn Hills, MI

This 65,000 s.f. manufacturing facility houses injection mold equipment which produces quick connect fittings for the automotive industry. The facilities energy usage is dominated by the electrical requirements for the injection mold equipment. The owner elected to purchase expensive energy efficient electric equipment in lieu of the traditional hydraulic equipment. This decision resulted in great utility cost savings. Through the CIR USGBC process SAI solicited a favorable response allowing the equipment to be included in the energy cost savings of the facility. This resulted in 8 points for the EA Credit 1, and achieved LEED Gold rating

Livonia Public Schools – Livonia, MI

Commissioning per ASHRAE 0-2005 guidelines for 3 phases of the 2013 Bond program, includes 17 schools totaling approximately 1.75 million sq. ft. Incorporates commissioning a major mechanical refurbishment to the schools including HVAC & controls; domestic hot water; lighting & day lighting controls; UPS systems & emergency generators.

Baywood Hotel – Miami, FL

Fundamental and enhanced commissioning to obtain LEED NC 2009 certification. 7-story hotel building with basement, includes below ground parking; 2nd level lounge; lobby; spa; fitness area; laundry; meeting rooms & food prep area. SAI commissioned HVAC & controls, hot water, lighting & day lighting controls and renewable energy systems.

References

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