WORKING TOGETHER

consultants in the geosciences,
materials and the environment

SUMMER 2008

Demand in Solar Energy Drives Hemlock Semiconductor Expansion

Growing concerns about global warming and rising energy prices are encouraging the use of sustainable energy sources. Demand is growing for renewable energy using solar technology and with it demand for polycrystalline silicon — a cornerstone material used in the production of solar cells.

A BRIGHT SPOT

That's great news for Hemlock Semiconductor Corporation (HSC), a joint venture of Dow Corning Corporation, the world's leading producer of polycrystalline silicon. As worldwide demand grows for polysilicon, so does the HSC facility located near Saginaw in Hemlock, Michigan.

To meet the future demand for solar cells, HSC is currently undergoing a massive expansion at its facility where construction is underway on a new $500 million expansion that is expected to start-up later this year. HSC is also investing up to $1 billion in the next four years for another expansion which is expected to increase the company's annual output of polysilicon to 36,000 metric tons by 2012.

THE HEAT IS ON

With the expansions in high gear, SME is working closely with HSC and the project team which consists of multiple design, construction, and specialty contracting firms to quickly and effectively meet an aggressive schedule. Throughout the project, SME has provided geotechnical design services, as well as solutions to a number of geotechnical and constructability challenges. We provided vibration consulting to assist with installation of specialized equipment and in-situ electrical resistivity testing for substations and switchyard grounding. We also collaborated with the design team and value-engineered a timber pad to support a large crane required for erection of a large tower structure. Our design services and extensive experience with the subsurface soil conditions enabled the use of one layer of timber mats to safely support the crane during the heavy lifting of the tower components. This resulted in project cost savings and expedited erection of the tower. During construction, our services include consulting and testing related to foundations, concrete, steel, masonry, roofing and pavements.

"Our expansion is on a fast-track schedule as our customers in the solar and semiconductor industries have a critical need for more of our materials," said Greg Skufca, director of polysilicon expansions at HSC. "Time is of the essence and SME is a tremendous asset to our project team. We value their ability to quickly provide solutions to geotechnical and constructability issues at this site. Their suggestions and alternatives have resulted in a better quality and/or more cost-effective resolution to problems. We look forward to working together with SME as our expansion continues."

When it comes to advanced renewable energy technologies, solar is lighting the way and HSC faces a bright future.

The solar energy industry is growing at a tremendous pace and a readily available supply of polycrystalline silicon is essential to continued innovation in this industry. *Image courtesy of Hemlock Semiconductor Corporation.*

The HSC expansion means an infusion of needed high-tech jobs to the state and is a boon to Michigan's growing solar power industry. *Image courtesy of Hemlock Semiconductor Corporation.*

For more information, contact Joe Noykos, PE at noykos@sme-usa.com.

Metropolitan Detroit's 101 Best and Brightest Companies to Work For Winner 2007

1964 44 2008 Years of Service

SME Earns Best and Brightest Award

SME has been named one of "Metropolitan Detroit's 101 Best and Brightest Companies to Work For" by the Michigan Business and Professional Association. The awards honor companies in southeast Michigan for their exceptional work environment and exemplary human resources practices. Selected companies are recognized for excellence in communication, compensation and benefits, diversity and multi-culturalism, employee education and development, employee engagement and commitment, recognition and retention, recruitment and selection, community initiatives, and work-life balance.

MBPA presented our Human Resources team with the "Metropolitan Detroit's 101 Best and Brightest Companies to Work For" Award. Pictured left to right: Elaine Nading, PHR (SME), Jennifer Kluge (MBPA), and Sherri Fountain, SPHR, and Marcy Springer (SME).

Specialized Masonry Consulting at Albright College in Pennsylvania

SME used flatjack testing, an innovative technique, to nondestructively evaluate the compressive strength of the historic masonry wall.

Albright College, located about an hour west of Philadelphia in Reading, Pennsylvania, recently held a ceremonial groundbreaking for a $27 million renovation and expansion of its historic Merner-Pfeiffer Hall of Science. A new four-story building will be attached to the current science building that was built in 1929, and last expanded and renovated in 1965.

Before construction could begin, the design team was challenged to preserve the character and history of the grand building, as well as meet current 2006 International Existing Building Code (IEBC) standards. The team initially anticipated that the existing building would need to be structurally reinforced to withstand current lateral load requirements.

Working with Entech Engineering, Inc.; Robert Darvas Associates; and Lord, Aeck and Sargent, SME provided the evaluation of the building's masonry components and assessed their physical properties, including the use of in-situ flatjack testing. The benefit of flatjack testing? It provided a direct reading of in-situ compressive stress of the masonry without damaging the façade, and by using this procedure, reduced the amount of full-scale prism samples needed for structural analysis from 24 to 6.

Paul Larsen, PE, Structural Engineer with Robert Darvas Associates asserts, "This project was challenging because we were really designing three buildings in one – the 1926 section, the 1965 addition, and the current addition. To tackle this challenge, we involved experts like SME. They brought tremendous value to the project through their extensive knowledge of older masonry construction. Working with SME we were able to determine the composition of the walls and save Albright College hundreds of thousands of potential dollars in unnecessary reinforcing costs."

For more information, contact John Zarzezecki, CWI, CDT at zarzecki@sme-usa.com.

River House Rises Toward Completion

Occupancy is set to begin in September at the new River House Condominiums.

At a soaring 34 stories, the River House Condominiums will soon claim the title of tallest building in Grand Rapids, the second tallest building in Michigan and the tallest residential structure in the state. Now that's pushing the envelope! And speaking of envelope, this building's shimmering, blue "skin" is made up of 350-pound glass panels, each 5-foot wide and of varying heights from 10 to 14 feet, depending on the floor.

"The frame and panel comes as a unit and the units stack into each other like a giant Lego's set," says Matt Larsen, Wolverine Construction project manager. "The 14-foot panels are lifted by the Pecco tower crane. The other units will be set from the floor above using a cantilevered crane that will swing the panels out for the crews to guide into place."

Developed by Robert Grooters Development on less than a half-acre, the $90 million, 500,000 square foot building will include 207 upscale condominiums. Workers are currently constructing about one floor every nine days. Our services as each floor is completed include observing and documenting the floor slab reinforcing steel and post tension cables; installing maturity probes and obtaining maturity readings; floor concrete testing; observing and documenting the column reinforcing steel; and laboratory testing of concrete cylinders.

This fall owners will begin moving into floors three through 25 and the remaining floors will be ready by the end of the year.

For more information, contact Lou Northouse, PE at northouse@sme-usa.com, or visit the River House website at www.grriverhouse.com.

From Battlefield to Brownfield to Battlefield Again

A FIRST IN THE NATION!

Along the River Raisin in southeast Michigan lies the site of Frenchtown, the original settlement of the City of Monroe and a significant battleground during the War of 1812. The Battle of the River Raisin in 1813 was critical in securing the present day boundaries of the United States and Canada. A century later, the 150-acre site housed a paper mill complex that operated until 1995.

SME has been working with Homrich Incorporated, who acquired the abandoned paper mill complex, and the City of Monroe to preserve the battlefield and prepare the remaining property for redevelopment. Homrich agreed to donate the 30-acre historic portion of the site to the Port of Monroe, as a steward for preservation and archeology, but the transfer was hindered by environmental liability issues.

Property transfer was complicated because of federal Resource Conservation and Recovery Act (RCRA) Corrective Action liability, which follows property ownership. SME's staff worked with the City's environmental attorney, U.S. EPA, and Michigan Department of Environmental Quality (MDEQ) for over seven years to develop a strategy for addressing the Port's potential regulatory and financial liabilities. To obtain acceptable RCRA liability assurances sufficient to allow the property transfer to proceed, SME conducted a Current Conditions Assessment and designed appropriate environmental response actions into the site demolition program.

SME and the City secured a $1 million Clean Michigan Initiative Grant to fund the environmental activities needed to secure a RCRA No Further Interest (NFI) letter to address future Corrective Action regulatory liability issues. The Monroe County Historical Society funded pollution liability insurance to mitigate the Port's future potential financial liabilities, and building demolition and environmental remediation for site preservation. Legislation directing the National Park Service to evaluate the battlefield for inclusion in the national park system, sponsored by Congressman John Dingell and Senator Carl Levin, was adopted by the U.S. Congress and approved by President Bush. Currently, we are assisting with closure and adaptive reuse plans for a former landfill and redevelopment of a 40-acre, non-historical, parcel of the site.

Tom Russow, environmental attorney for the City and Port of Monroe asserts, "SME has been a tremendous partner during this decade-long project. Their team worked tirelessly to help design and negotiate federal and state environmental liability protections and obtain funding for building demolition and site preservation."

The abandoned plant buildings that were eyesores and presented threats to public health and safety are gone.

In their place is a large, park-like, historic War of 1812 battlefield and interpretive center – a remarkable transformation over the past decade.

For more information, contact James Harless, PhD, CHMM, RBP at harless@sme-usa.com.

State of the Streets in Kalamazoo

The data gathered from the pavement condition survey will assist in extending the life of the City's existing pavements.

Good quality streets support a healthy local economy, reduce the cost of vehicle maintenance, and help improve our quality of life. The City of Kalamazoo understands the value of their local roadways and maintains a Roadsoft Pavement Management System (PMS) to assist in managing street maintenance and selecting improvement strategies.

Recently, we performed a pavement condition survey on 180 miles of local streets to assist in updating the City's Roadsoft database. For each road segment, a rating was assigned for surface condition, ride quality, and drainage condition. Data was collected and inputted into the Roadsoft Data Collector program in the field using a laptop. We also utilized a GPS unit integrated with the Roadsoft program to locate the streets and track our progress of data collection. Subsequently, we uploaded the collected data into the City's master database.

Shahid Abbas, Traffic Engineer, with the City of Kalamazoo Department of Public Services asserts, "SME has done a great job evaluating our pavements. The information they provided will assist with planning and budgeting future short-term and long-term roadway improvement projects. We look forward to working with SME in the future."

For more information, contact Tim Mitchell, PE at mitchell@sme-usa.com or Jason Schwartzenberger, PE at schwartzenberger@sme-usa.com.

Two SME Projects Earn Pavement Awards

The National Asphalt Pavement Association (NAPA) awarded the **Chrysler High Speed Oval Test Track** in Chelsea, Michigan the *"Quality in Construction Award"* at the recent NAPA Annual Meeting in Phoenix, Arizona. The project also earned the *"Award of Excellence"* in the Special/Challenging Projects Category from the Asphalt Pavement Association of Michigan (APAM). NAPA and APAM honored Ajax Paving Industries, Inc.; Chrysler, LLC; Wilcox Professional Services; and SME for their work on this project.

SME provided construction materials services during reconstruction of the six-lane, 4.71-mile test track. Building a track with a parabolic profile was no small feat! The greatest success of the project was the final ride quality, which was measured in inches/mile. Ajax was able to build the track with less than .5 inches/mile, far exceeding the contract specifications. This was an extraordinary achievement considering the high level of difficulty.

APAM also awarded **The Mall at Partridge Creek** in Macomb County the *"Award of Merit"* in the Commercial Projects Category. APAM honored the Taubman Company; John Carlo, Inc.; Skanska USA; and SME for their efforts on this project. During the design phase, SME performed a geotechnical evaluation and provided recommendations for pavement design. During construction of the 640,000 square-foot open-air shopping center, we provided construction materials services for pavements as well as foundations, structural steel, soil density, and concrete.

To produce the stringent friction requirements Chrysler demanded, and to create a durable riding surface, Ajax used three different asphalt mixes, placing approximately 72,000 tons of asphalt on the High Speed Oval Test Track. *Image courtesy of Ajax Paving Industries, Inc.*

UPS Pavements and Roofs

SME is providing pavement and roof consulting services for multiple UPS facilities in Michigan and Ohio. From St. Joseph to Traverse City to Port Huron to Livonia to Dayton and in between – we're here for UPS.

SME is helping UPS maintain their pavements and roofs at several facilities in Michigan and Ohio. SME works with UPS to salvage as much of the existing pavement system by recommending alternatives to recycle the pavement where possible or by using portions of the existing pavement in the new system. Our pavement engineering services include evaluating the existing conditions, developing pavement rehabilitation plans and providing construction monitoring services. Once UPS selects what areas will be repaired and the rehabilitation method, we prepare plans and specifications, recommend potential contractors and monitor the construction activities. Frequently, we work with the contractors at night and on weekends during construction to minimize the impact on the facility operations.

We also provide similar roofing services during rehabilitation of existing roofs. For a re-roofing project in Dayton, Ohio, rather than replace the entire roof system, we worked with UPS and the contractor to salvage much of the in-place roofing insulation by conducting extensive testing of the in-place moisture. Dry insulation was not removed which reduced the project cost as well as the volume of waste generated. Similar services were performed at the Livonia and Lansing centers.

Jeff McBride, UPS Plant Engineering Area Manager for the Metro Detroit and Michigan Districts stated, "I've successfully worked with SME for over 20 years and they continue to do a great job. SME is a partner in each project, every step of the way. SME provides valuable expertise during planning and design, construction quality assurance, and after project completion."

For more information contact Chuck Gemayel, PE at gemayel@sme-usa.com or Mark Michener, CDT at michener@sme-usa.com.

Carrier Creek

Delta Township's Carrier Creek Restoration project has demonstrated the epitome of partnership. The project has involved teams from the Eaton County Drain Commissioner, the Michigan Department of Environmental Quality, the Michigan Department of Transportation, the U.S. Environmental Protection Agency, Friends of Carrier Creek, Eaton County, Delta and Windsor townships, and businesses and residents of the Carrier Creek Watershed.

SME's involvement began in 2003 with geotechnical and design work, and has continued through the construction phase beginning in the spring of 2004. The project was designed to protect and enhance the natural resources of the corridor. Based on stream sampling, it has already succeeded in improving water quality, which significantly increased fish and bug populations; increasing sunlight to nurture more diverse plant species; re-establishing floodplains with wetlands being preserved or enhanced; and removing logjams and brush to help stabilize flow.

Most recently, SME has been involved in removing the surcharge from the Division 6 area detention pond and assessing the side slope stability of the embankment. In Division 7, we observed placement of engineered fill in the future building development area.

"SME has continued to provide prompt and valuable services regarding slope stability issues as we wind down on this most challenging project," states Dave Wilcox, ECDC Project Manager.

For more information, contact Michael Thelen, PE at thelen@sme-usa.com.

Waterside Marketplace: SME Solution Saves $600,000 in Asphalt Costs

Waterside Marketplace, a $75 million retail development, includes national retailers JCPenny, Dick's Sporting Goods, Best Buy, TJ Maxx, and Old Navy. *Image courtesy of Clark Construction Company.*

Macomb County residents recently celebrated the grand opening of Waterside Marketplace, a 500,000 square-foot shopping center that houses 25 national retailers in Chesterfield Township, Michigan.

Before construction could begin, the project team, consisting of Clark Construction Company, REDICO, Professional Engineering Associates, and SME, had to tackle challenging highly-plastic soil conditions. Approximately half of the 86-acre site consisted of poorly drained (clayey/silty) soils with a high plasticity index and moisture content. These types of soils are difficult to stabilize and can experience significant shrinking/swelling with changes in moisture content. If left untreated, the resulting subgrade movements would cause damage to the new structures.

To stabilize the soil conditions, SME recommended implementing a lime treatment program. Lime kiln dust – 8,000 tons of it – was used to absorb the moisture and stabilize the clay. The lime treatment saved valuable time on this fast-paced project by permitting earthwork to continue during winter months.

SME also provided solutions to soil settlement and pavement design and construction challenges. To accelerate settlement, a surcharge program was recommended and 1,800 wick drains were installed. To address pavement issues, SME proposed creating a greater overall pavement section thickness using a thinner asphalt surface layer along with a thicker aggregate base. The alternate pavement design increased pavement life by reducing the potential for adverse effects from frost-heave, dispersing concentrated traffic loads before reaching the clayey subgrade, and limiting significant pavement cracking associated with thick asphalt concrete layers — and it helped the project budget.

Jeff Konkle, Project Manager with Clark Construction, states, "SME's recommendation to use lime and a thicker stone section saved $600,000 in asphalt costs."

Allen Blower, Project Director with Clark Construction, asserts, "The extremely plastic soils here were a significant challenge. SME solved a variety of soil challenges with a combination of treatments that kept the project on schedule and saved money. Throughout the project, SME was very responsive and their expertise and leadership were instrumental."

For more information contact Chuck Gemayel, PE at gemayel@sme-usa.com or Joel Rinkel, PE at rinkel@sme-usa.com.

University Hospital Roof Reconstructive Surgery

Doctors and facility managers share a common purpose—they are both caregivers. Facility managers at University Hospital in Ann Arbor have been taking care of their 11-story, 550-bed hospital since first opening its doors in 1986. Today, the hospital's 190,000-square-foot roof is undergoing reconstructive surgery which will add many years of life to the roof system. SME assisted the University of Michigan Hospitals and Health Centers (UMHHC) with the diagnosis and remedy, which includes replacing the original built up roofing system and restoring exterior wall components.

Although the procedure sounds easy to follow, the project team worked through numerous hurdles before reconstruction could begin. For example, UMHHC, Barton Malow and SME developed a detailed logistics and sequencing plan for construction staging that allowed full continued access to the Emergency Department, as well as the surrounding network of pedestrian bridges and parking structures. The project is in full swing and the hospital remains operational 24/7. SME continues to assist the project team with quality assurance services and resolving issues that arise during construction. UMHHC expects the project will be complete in November.

If your roof is in need of TLC (or flat-lining altogether) call SME. We're here for you!

SME is providing roof consulting services during replacement of the University Hospital roof.

For more information, contact Mark Michener, CDT at michener@sme-usa.com.

Frank Henderson Retires

SME recently hosted a special retirement celebration in honor of **Frank A. Henderson, PG,** Senior Vice President. Frank has been a valued and loyal team member since joining the firm in 1973 as a Field Engineer. Over the years, his responsibilities grew propelling him to Director of Operations and Group Leader of our Construction Materials Services Group. He also serves on our Board of Directors.

The celebration was full of laughter (and a few tears) as we fondly shared memories spanning the past 35 years. SME team members and Frank's family paid tribute to his passion for client service, leadership in mentoring fellow colleagues, and his seeming effortless ability to balance work, love and play. Although he worked on some of our toughest and largest projects like GM's Poletown Plant, the Detroit Renaissance Center, and the Southfield Town Center, he found time to coach his daughter's softball teams and support his son's passion for hockey, including trips to Canada and Russia to cheer him on.

This summer, Frank and his wife, Sally, plan to travel and spend time up north in the Traverse City area before heading to New Mexico where they are building a new home. Our warmest wishes go to Frank for a happy and healthy retirement!

APPOINTMENTS

Mike Gase, CWI, ASNT III was named a Senior Associate. He has 25 years of experience and manages projects related to structural steel, welding, industrial piping, nondestructive testing and failure analysis of structural materials.

Mark Michener, CDT was named a Senior Associate. With over 35 years of experience, he provides solutions for roofing/waterproofing and historic restoration projects. He assists clients with achieving LEED accreditation.

Tom Skotzke was named a Senior Associate. He has 20 years of experience and manages the firm's computer information systems. He develops specialized software and database programs for a variety of projects.

Nick Larabel, CPG has been named an Associate. With 15 years of experience, he manages hydrogeologic studies for geothermal, wastewater and storm water facilities. He also provides sustainable solutions for brownfield redevelopment projects.

Rhonda Miller, CHMM has been named an Associate. She has 17 years of experience and specializes in Toxic Release Inventory (TRI) reporting, environmental due diligence and brownfield redevelopment projects.

Ron Pelkie, CDT has been named an Associate. With 20 years of experience, he provides solutions for roofing/waterproofing issues related to building envelopes. He specializes in infrared thermography and preparing plans/specifications for rehabilitation.

Susan Brown was named Team Leader for the Plymouth laboratories. **Starr Kohn, PhD, PE** was named Group Leader of Drilling Services. **Gary Madej, PE** was named Group Leader of CMS Services. **Davin Ojala** was named Team Leader for the Kalamazoo Environmental Team and **Brad Parlato, PE** was named Team Leader for the Kalamazoo CMS Team. **Larry Shook, PE** has been named Regional Manager of SME's Bay City office. **Keith Toro, PE** was named Team Leader for Plymouth field engineers and Co-ops.

PROMOTIONS

Matthew Baker, CWI was promoted to Materials Specialist II. **Gail Barton** and **Yvonne Nance** were promoted to Accounting Associate III. **Lori Dalton** and **Pam Stopper** were promoted to Administrative Assistant II. **Errol Gilbert** was promoted to Operations Coordinator. **Tony Hosbein**, **Eric Michener** and **Kevin Winfield** were promoted to Technician III. **Jeremy Hugo, EIT**; **Brian Moynihan, PE**; and **Megan Jacobs, EIT** were promoted to Engineer II. **Amanda Katt-Cassidy, SMSI, CDT** was promoted to Materials Specialist III. **Jason Lafayette** was promoted to Environmental Specialist II. **Chris McNalley** was promoted to Materials Engineer II. **Mireille Telners** was promoted to Accounting Assistant II. **Michael Thelen, PE** was promoted to Senior Consultant. **Bob Tober** was promoted to Operations Manager and named Team Leader for CMS in Bay City. **Michelle Yaremchuk** was promoted to Marketing Assistant II.

TRANSFERS

Jeff Krusinga, PE, GE, Senior Consultant, transferred from our Plymouth office to our Kalamazoo office. **Sara Lepine**, Staff Engineer, transferred from our Plymouth office to our Bay City office.

AWARDS

Myndi Bacon, PE received the "Foremost Leader Award" from the NAWIC Battle Creek/Kalamazoo Chapter. Myndi was recognized for her outstanding achievements in advancing the role of women in the construction industry. She serves as Vice President of the NAWIC Battle Creek/Kalamazoo Chapter and Vice President of the ASCE Southwest Michigan Branch. With 12 years of experience at SME, Myndi specializes in providing solutions to geotechnical and environmental engineering challenges and constructability issues. Congratulations, Myndi!

TEAM ADDITIONS

Our Plymouth office welcomed **Kate Chulski, EIT**, Staff Engineer; **Chad Lenzi** and **Nicole Link**, Engineering Technicians; **Chris Naida**, Senior Engineer; and **Jason Nance** as Assistant Driller. **Travis Bruski**, Engineering Technician, and **Joe Reinke**, Staff Engineer, joined our Bay City office. **Chris Holmes**, Engineering Technician, joined our Grand Rapids office. **Erik Ventura**, Staff Engineer, joined our Lansing office. In Shelby Township, we added **Rob Ruedisueli** as Engineering Technician and **Tony Thomas, PE** as Senior Project Engineer. Tony is responsible for projects involving pavement management, research, evaluation, design consultation, technology transfer, and quality control during pavement construction.

CERTIFICATIONS/REGISTRATIONS

Hayder Al-Hilal, EIT and **Jayson Graves, EIT** became certified Structural Masonry Special Inspectors through the International Code Council. **Sherri Fountain, SPHR** earned Senior Professional Human Resources certification from the Human Resource Certification Institute and **Elaine Nading, PHR** earned the Professional in Human Resources certification. **Amanda Katt-Cassidy, SMSI, CDT** attained the Construction Documents Technologist certification from the Construction Specification Institute. **Rhonda Miller, CHMM** became a Certified Hazardous Materials Manager through the Academy of Certified Hazardous Materials Managers. **Brian Moynihan, PE** became a registered Professional Engineer in Michigan. **Melissa Ward, EIT** became a certified Storm Water Management Operator with the MDEQ. **Brian Zatloukal, PE** became a registered Professional Engineer in Ohio.

PROFESSIONAL/ASSOCIATIONS

Andy Emmert, CPA serves on the Habitat for Humanity of Western Wayne County Board of Directors. **James Harless, PhD, CHMM, RBP** is a Director on the Institute of Brownfield Professionals Board. **Laney Henson, CPSM** is serving on the USGBC Detroit Regional Chapter Communications Committee. **Laurel Johnson, PE** is Vice President of the NAWIC Detroit Chapter. **Cheryl Kehres-Dietrich, CGWP** was appointed to the Schoolcraft College Environmental Studies Advisory Committee. **Starr Kohn, PhD, PE** is serving on the Transportation Research Board Executive Committee on Pavement Management. **Nick Larabel, CPG** chairs the City of Plainwell Brownfield Redevelopment Authority and serves on the Downtown Development Authority Board. **Rhonda Miller** is serving on the Certified Hazardous Materials Managers of Michigan Credential Outreach Committee.

Congratulations to **Matt Dejardins, PE**; **Jeff Edwards**; **Amanda Katt-Cassidy, SMSI, CDT**; **Debra Osuch, REM**; and **Paul Schmeisl, EIT** for successfully completing the ASFE Fundamentals of Professional Practice (FOPP) Program.

Eric Eckler earned a Bachelor of Science degree in Civil Engineering from Lawrence Technological University. **Yvonne Nance** earned a Master of Science degree in Accountancy from Walsh College. **Paul Roberts** earned a Bachelor of Arts degree in Geology from Albion College.

PRESENTATIONS/PAPERS

Chris Byrum, PhD, PE and **Professor Brian Barkdol** (MTU Department of Civil and Environmental Engineering) presented “Bridge Geotechnical Considerations - Designing for Scour” at the Michigan Bridge Conference. At this conference Chris also presented "Case Studies: Working Around Artesian Groundwater." At the Transportation Research Board Conference, Chris presented his paper entitled “Modeling the Effect of Stone Columns on Lateral Squeeze of Weak Soils.” **Dan Cassidy, CPG** prepared an article entitled, “Federal Brownfield Financial Incentives Program” published in Ready Set Go – A Developer’s Guide to Downriver Brownfield Properties by the Downriver Area Brownfield Consortium (DABC). The book also included the following articles by **James Harless, PhD, CHMM, RBP** “Environmental Liability Protections for Brownfield Redevelopment,” “Financial Support for Brownfield Redevelopment in Michigan,” and “Downriver Communities Find the Money for Brownfield Redevelopment.” James also presented the following at the Brownfields 2008 Conference: “Hold the Starch – Cleaning the Cleaners,” “Move Over Mayberry – Brownfields in Small Towns,” and “Brownfields Revolving Loan Funds: Ideas, Strategies and Solutions.” **Gary Dannemiller, CPG** presented “Proposed Groundwater Assessment Tools” at the Michigan Annual Potato Growers Industry conference. **Starr Kohn, PhD, PE** and **Rohan Perera, PhD, PE** co-authored a paper with **James Cable, PE**, **Steven Karamihas, PE**, and **Mark Swanlund** entitled, “Use of Profile Data to Detect Concrete Paving Problems.” The paper was submitted to the 9th International Conference on Concrete Pavements. **Jim Less, CIH** presented Excavation Safety – “Digging Up Environmental and Safety Hazards” at the AGC Michigan Safety Day. **Mark Michener, CDT** and **Craig Hoernschemeyer** (Cranbrook Educational Community) presented their technical paper on “Copper Roofing and QA Testing,” at the ASTM National Conference in Tampa. At this conference, Mark and **Ed Lindow, PE** also presented their technical paper entitled, “Green Roof Case Study.” **Bob Rabeler, PE** presented “Geotechnical Engineering” related to updating the Building Code for special inspections at a SEAMi meeting.

CO-OPS

SME proudly honored over 35 Engineering Co-ops and Interns at our 18th annual Co-op/Intern Recognition Banquet. The students, who hail from a variety of schools in Michigan and the Midwest, gain practical experience in soil and construction materials evaluation, geotechnical engineering/ design, and pavement management. Thanks to all of you!

SME is pleased to congratulate former SME Co-ops, **John Baldauf**, **Kevin Barton**, **Brian Kordich** and **Chelsea Snodgrass** who were recently awarded scholarships at the ACEC-MSPE Awards Banquet.

IN MEMORIAM

Gary Docking (April 1956 – November 2007) was recently taken from our SME family. Gary began his career with us in 1979 and later managed our asphalt, soils, and concrete labs. He was well-liked by everyone and his passion for providing outstanding client service was contagious. He was quick to share his love for fishing, hunting, hockey, golf and softball with family, friends and fellow team members. He was blessed with an infectious smile, enthusiastic laugh, gentle heart, and an easy-going disposition. We fondly remember Gary for his hard-work, dedication, teamwork, enthusiasm, perseverance and moxie. We thank him for touching our lives in so many ways. He is missed by all.

SME CORPORATE OFFICE

The Kramer Building
43980 Plymouth Oaks Blvd.
Plymouth, MI 48170-2584
734 454-9900

www.sme-usa.com

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586 731-3100

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733 East Eighth Street, Ste. 102
Traverse City, MI 49686-2665
231 941-5200

SME Grand Rapids
4705 Clyde Park Avenue SW
Grand Rapids, MI 49509-5114
616 406-1756

SME Lansing
2663 Eaton Rapids Road
Lansing, MI 48911-6310
517 887-9181

SME Toledo
415 Tomahawk Drive
Maumee, OH 43537-1633
419 897-0409

SME Working Together

REPRESENTATIVE CURRENT PROJECTS

GEOTECHNICAL

Boiler Bldg. Midland Cogenerational Venture
Casino Infrastructure, Emmett Twp.
City Center II, East Lansing
Commercial Parking Structure, Grand Rapids
Cranbrook Art Museum/Library, Bloomfield Hills
Curling Center, Midland
District 52-2 Courthouse, Independence Twp.
Dowagiac Airport SRE Bldg.
Elizabeth Park Boat Landing, Trenton
Gateway Park Phases I/II, Romulus
Harbor Shores Development, Benton Harbor
Health Care Facilities: 11 Facilities, Statewide
K-12 Schools: 10 School Districts, Statewide
Limestone Grinding Facility, Lorain, OH
MSU Several Projects, East Lansing
North Pointe Town Center, Blackman Twp.
Office Building, Traverse City
Post Office Addition, Cadillac
Premier Diagnostics, St. Clair Shores
Proposed Casino and Infrastructure Improvements, Battle Creek
Sewer/WWTP Improvements, Several Communities, MI, IN, OH
UM Several Projects, Ann Arbor
Waste Storage Facilities, Several Sites

CONSTRUCTION MATERIALS SERVICES

Auto-Owners ITOS Building, Delta Twp.
Bosch Test Track Reconstruction, Flat Rock
Churches, Clarkston, Rochester Hills
City of Battle Creek Contract
Delta Dental Expansion, Okemos
Gerald R. Ford Intl. Airport, Grand Rapids
Health Care Facilities: 11 Facilities, Statewide
ITC Substations, 50 Sites
K-12 Schools: 18 School Districts, Statewide
Kent County Human Services, Grand Rapids
Lucas County Arena, Toledo
Madonna University Science and Media Center, Livonia
Michigan State Police, Lansing
MSU Several Projects, East Lansing
Muskegon Airport
Olivet College Cutler Event Center
Retail Developments, Hartland Twp., Novi, Roseville, White Lake Twp.
Senior Centers, Bloomfield Twp., Holt
Suburban Mazda, Sterling Heights
UM Several Projects, Ann Arbor
US Coast Guard Station Improvements, Cheboygan
Waterford Place, Georgetown Twp.

FACILITY SERVICES

Apartment Complex, Austin, TX
Argonaut Building, Detroit
AST Audits, MI and OH
Beaumont Hospitals, Grosse Pointe, Troy
Blessed Sacrament Cathedral, Detroit
Blue Cross Blue Shield, Detroit, Southfield
BP Refinery, Toledo
DDA Parking Deck Management, Ann Arbor
Michigan International Speedway, Brooklyn
NWA NFPA Tank Audits, Romulus
Oak Hollow PCA, Southfield
Oakwood Hospital Parking Decks, Dearborn
Tunnel Condition Survey, Grand Rapids
UM Parking Structures, Ann Arbor
Westin Hotel, Southfield

ROOFING

Detroit Public Library
Detroit Towers, Detroit
Fire Station, Delta Twp.
Henry Ford Estate, Dearborn
Islamic Center, East Lansing
Northwest Airlines, Romulus
Odawa Casino, Petoskey
Selfridge ANGB Freezers, Harrison Twp.
Sheraton Lansing Hotel
St. Paul Copper Roofing, Clinton Twp.
St. Paul of the Cross Retreat Center, Detroit
UM Martha Cook Hall, Mosher Jordan, Ross School of Business, Stockwell Hall, Ann Arbor
USPS, Detroit, Pontiac, Southgate
Wellington Place Manor, Southfield

PAVEMENT

AutoAlliance, Flat Rock
Carpenter Road Reconstruction, Ypsilanti Twp.
Delta College South Campus, Bay City
FHWA Technical Assistance Contract
Ford Land, Various Sites
Gateway Project, Detroit
General Dynamics Land System, Sterling Hts.
Grand River Road Reconstruction, Brighton
Jackson Road Reconstruction, Washtenaw Co.
Keystone Road Reconstruction, Traverse City
M-27/M-43 Reconstruction, Hastings
M-89, Otsego Twp. and Trowbridge Twp.
MDOT Signs, Several Locations
Oakland University, Rochester
Porous Pavement, Ann Arbor DDA
UM Dearborn
Various Streets, Livonia

ENVIRONMENTAL

Argonaut Building, Detroit
Central Sanitary Landfill Groundwater Monitoring
Chloride Investigations, 5 County Road Commission Sites & WWTP Facility
EPA Brownfields Grant Management, 7 Communities, Statewide Michigan
Fifth Third Landfill Redevelopment, Auburn Hills
Former Metropolitan Hospital Redevelopment, Grand Rapids
Industrial Waste Landfill Closure, Monroe
Luxury Loft Redevelopment, Detroit
Mason Run, Monroe
Pavilions of Troy, Troy
Pinnacle Race Track Development, Huron Twp.
RCRA Corrective Action, Delta Twp.
Remedial Investigations/Interim Response Activities for 10 Former MGP Sites
River East Mixed Use Brownfield Redevelopment, Hastings
Shopping Center/Brownfield Redevelopment, Hartland
TRI Reporting for Automotive Firms/Suppliers
WACO Aircraft Manufacturing and Restoration, Battle Creek
WK Kellogg R&D Expansion, Battle Creek

SPECIAL

Art Iron Fabrication Shop, Toledo
AST Condition Assessments, Kansas City
Buried Fuel Pipeline Vibration Consulting
Coatings Consulting, Dearborn, Detroit, Grand Rapids
Concrete Foundations, China, Korea
Ford Motor Paint Shop, Chicago, Mexico
Fireline Piping Review, Shelby Twp.
Four Mile Dam, Alpena
Hope College Historic Mortar Consulting
King Milling Dam Inspection, Lowell
Livingston County DPW Building
M-19 Geodynamics, Lapeer
Marathon Oil AST Piping and Welding QA
Marine City Middle School, East China
Masonry Consulting, Lansing, Rochester
McCoig Recycling Fly Ash Facility
Metallographic Failure Analysis
Salvation Army Adult Rehab Center, Romulus
Slurry Wall Design, Fort Wayne, Grand Rapids
St. Lawrence Mausoleum, Shelby Twp.
Vibration Consulting Health Care Facilities
Whittier Hotel Façade, Detroit
Wolverine Power Plant, Rogers City
YMCA, Lansing

SME Working Together

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Soil and Materials Engineers, Inc.
E. Laney Henson, CPSM, Editor
Email: henson@sme-usa.com

Soil and Materials Engineers, Inc.
The Kramer Building
43980 Plymouth Oaks Blvd.
Plymouth, MI 48170-2584

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