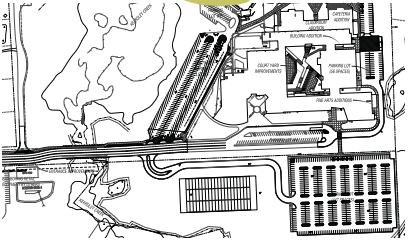




The SDA CONNECTION



Asset Management

As we recover from the damage and power outages of the recent summer storms, it is a good time to reflect on how things could be handled next time to mitigate the inconveniences. Those who implemented an Emergency Plan prior to the storms fared much better than those who did not.

When the SDA Rochester Hills office was built in 1997, an uninterruptible power supply (UPS) was installed to protect our entire computer network. The equipment provides "clean" electricity to all of our computer equipment. It also provides an opportunity to save data and shut down our systems during short power outages. In 2005, SDA installed a generator system to meet all our power needs through major electric outages. The two systems combined give SDA the ability to continue our operation, even through prolonged power disruptions when customers may experience their most critical need for our services.

OMCPWC - Forward Thinking

The Chapaton Pump Station and Retention Treatment Basin (RTB) is located at the northeast corner of Jefferson Avenue and Nine Mile Road in St. Clair Shores and services the cities of Eastpointe, Roseville, and St. Clair

Shores. The facility operates 24 hours per day, pumping dry weather flows into the Jefferson Interceptor and down to Wayne County for treatment. During large rain events, three 230,000 gpm pumps send the flow into the 28 million gallon RTB for storage and eventual discharge into the Jefferson Interceptor, eliminating residential sewer backups and untreated sewage discharge into Lake St. Clair.

Due to the sensitive nature of the facility, Detroit Edison (DTE) provides two separate power feeds to the facility. However, during the Northeast Blackout of 2003, which occurred on August 14, 2003 and affected an estimated 10 million people in the province of Ontario and 40 million people in eight states, the facility was left without power for approximately 25 hours.

Under the guidance and forward-thinking of Anthony V. Marrocco, the Office of the Macomb County Public Works Commissioner (OMCPWC) contracted with Spalding DeDecker Associates, Inc. (SDA) to perform a Power Reliability Study at the facility to generate alternatives for the powering of part or the entire RTB System during utility power failures and then to design the recommended option. *continued on page 2*

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Industry TIPS

When is it more cost-effective to replace pavement versus repair pavement? How can you maintain your pavement in good condition using the most cost-effective methods? Based upon the condition of your parking lot and the square footage involved, what is the cost to maintain or reconstruct?

Facility Managers who manage millions of square feet of property face these questions quite often. If you wait until your pavement is beyond repair and must be replaced, the cost can be astronomical. Money is much better spent annually to maintain pavement in good condition. A Pavement Management System is a cost-effective way to answer these questions, determine annual pavement maintenance budgets, and plan for Capital Improvement Projects. **See page 2 for more information on Pavement Management services and Pavement Management Programs (PMP).**

OMCPWC - Forward Thinking *continued*

The Reliability Study was submitted in December, 2003. The selected alternative will provide standby power to operate the basic equipment at the RTB under dry weather conditions. The system may be expanded in the future to add additional generators if needed to operate the large wet weather pumps.

SDA, with the assistance of EAM Engineers, Inc., completed the design of the system which includes an outdoor 500 kW natural gas generator with level II sound attenuation and weather proofing. The generator system includes an 800 amp transfer switch which will be located in the Basement B-1 Level near the 500 kVA substation and the motor control center. The controls, alarm, and signals will be fully integrated into the existing SCADA system for operator control and automatic transfer of power in case of a power failure. The system will be automatically exercised once per week to ensure readiness when needed.

Due to the importance of the project, the OMCPWC was able to secure State Revolving Fund (SRF) loans for the construction of the Project.

The project is currently being awarded with construction anticipated to begin in October, 2008.

New Projects

- *Detroit Paradise Valley - Harmonie Park Enhancement and Art Work Design*
- *Sears Holding Corporation - National Civil Engineering Consultant*
- *MDOT/City of Port Huron - Redesign of Local Streets Near the Blue Water Bridges*
- *Garden City Hospital Parking Analysis*
- *BMW Spartanburg Structural Steel Layout - Spartanburg, South Carolina*
- *Barnes and Noble Site Engineering, Woodland Mall, Kentwood, MI*
- *Canton Township SCADA Condition Assessment*
- *City of Troy - General Engineering Services Contract*
- *W. Bloomfield Safety Path Program - Construction Phase*

Check out the promotional video SDA and partner AND, Inc. provided to SEMCOG regarding the Ann Arbor - Detroit Regional Rail Project:
<http://www.semcog.org/AADD.aspx>

Pavement Management

Pavement reconstruction is one of the largest expenses a facility may incur. Spalding DeDecker Associates, Inc. (SDA) offers Pavement Management services nationally and provides the necessary tools and construction engineering experience required to implement a successful Pavement Management Program (PMP). The benefit to Facility Managers — **saving time and money.**

Our PMP consists of several phases:

- Identify and assign Pavement Condition Rating
- Develop Financial Plans / Budgets
- Develop Action Plans
- Re-assess Pavement based upon Plan Schedule

SDA successfully aids facility managers in the implementation of PMP goals, while achieving significant savings through the following methods:

Pavement Assessments

Areas of pavement are assessed, delineated, and assigned a standard condition rating. Standard condition ratings are utilized to predict deterioration and determine repair budgets. This information is entered into a database and is used to develop the PMP.

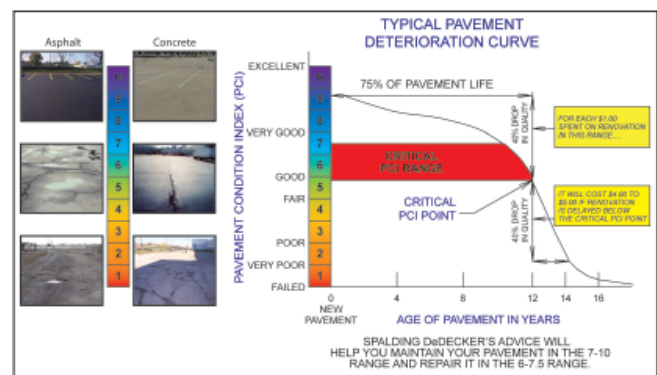
Pavement Management

After the initial assessment is complete, SDA will assist in managing the pavement network to meet the

desired pavement system goals. SDA maintains the database by incorporating new construction, reconstruction, and maintenance projects which impact pavement condition and/or use. To achieve the significant savings that PMP offer and to keep data relatively accurate, re-assessment should occur once every three years.

Financial and Action Planning

These plans offer tremendous justification for budget appropriation requests. Most of our programs provide tools for analysis of work backlog, budget prediction, future repair scenarios, and reporting capability. SDA can predict future conditions and create spending plans for Preventative Maintenance and Capital Improvement Plans.



Contact SDA for a complimentary Pavement Management Repair Cost Calculator.

Community Matters

On Tuesday, May 20, 2008, a group of volunteers from Spalding DeDecker Associates, Inc. worked together to host a K-12 Engineering and Surveying Fair at their Rochester Hills office. The purpose of this event was to build awareness of and to promote the civil engineering and surveying fields. There is a huge shortage of students pursuing these fields, and if children are exposed to these careers, they are more likely to investigate these technical professions.

Interactive, hands-on activities included:

- Weights and Measures Contest
- Surveying - Instruments, Pacing Contest, and Guess the Angle Contest
- Motion - Momentum and Impulse
- Quick-Fixes for Traffic Crashes
- Designing for "Greener" Stormwater
- Bridge Building
- Electrical Circuits
- SimCity
- Egg Drop
- Build a Barge
- Catapult
- Geology
- Material Testing
- Building Tall



"My son, Alexander, was so impressed working with the two of you (Mike and John DeDecker) in the survey area that he couldn't stop talking about it all evening. He really enjoyed walking through the various scenarios with John on different methods and concepts in surveying. He was absolutely taken in by the theory and concepts applied in survey, and he was very complimentary on the way that John presented the information. The impression that the two of you made was so great, that Alex actually sent me a text message this morning wondering if he could possibly co-op with the survey department sometime in the future to get a better feel for this type of work. I think that this level of interest was exactly what SDA had envisioned with regards to the Engineering Fair," said Andrew Keller.



The Cutting-Edge

Frank DeDecker receives Michigan State University Civil and Environmental Engineering - 2008 Distinguished Alumni Award

Recipients of this award, first presented in 2003, must be: graduates of the department; national leaders in their profession; contributors to the department, the college, or the university in some meaningful way; and community leaders whose actions reflect favorably on Michigan State University. Nominations are made by faculty, alumni, and other supporters of the department. The department's professional advisory board selects the winner.



When Frank graduated from De LaSalle Collegiate High School in 1944, he enlisted in the Navy for service in World War II. The Navy assigned him to its V-5 Pilots Training Program at Western Michigan College and, one year later, transferred him to its V-12 Officers' Training Program at Iowa State College. After the war's end in August of 1945, Frank was transferred to the Great Lakes Naval Training Center in Illinois. In January, 1947, Frank enrolled at Michigan State College. His first sleeping accommodation there was one of the many 3-bunk-high beds set up in the Jennison Gymnasium to accommodate the influx of the many veterans who began attending MSC then.

Early in his career, Frank worked for an underground construction contractor, Sugden & Sivier, on sewer and watermain relocations at the beginning of the John Lodge Freeway's construction in downtown Detroit. He later joined a Detroit firm that was designing sewer and watermain relocations for the John Lodge Freeway extension. There he worked with Vernon Spalding, with whom he founded Spalding, DeDecker & Associates, Inc. in 1954. Frank's final project before retiring in 1994 was designing the truck exit ramp for the Ambassador Bridge.

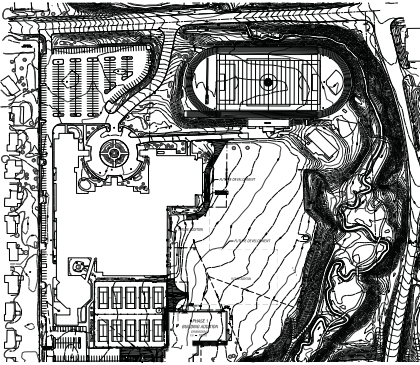
McDaniel Chosen as One of NSPE's Top Ten

SDA's Kimberly McDaniel, PE, PTOE was chosen as National Society of Professional Engineers' (NSPE) top ten candidates for the National Engineers Week "New Faces of Engineering" program.



Wanagat and Arnold Earn PE

Scott Wanagat and Jason Arnold recently earned their Professional Engineering Licenses in the state of Michigan.



 **Spalding DeDecker Associates, Inc.**
Engineering Consultants
Infrastructure • Land Development • Surveying

Contact Information

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For more information on the articles or subscriptions, please contact David Lakin at dlakin@sda-eng.com or Toll Free: 1-800-598-1600

We're on the web at www.sda-eng.com

Michigan Offices: Brighton | Detroit | Rochester Hills | Trenton

Community Matters *continued*

On Saturday, May 17, 2008, a group of volunteers from Spalding DeDecker Associates, Inc. joined the Detroit East Boston/Arden Park neighborhood in the **Motor City Makeover**. Although there are a couple of homes in the area that are not inhabited, the neighborhood is historical and generally made up of beautiful well-kept homes. There is an elementary school in the area, and child safety is of the utmost concern. There is small park next to a vacant home near the elementary school with overgrown vegetation. The team's job was to make this park a safe place for children.



June 7, 2008 was **Clinton River Day in Clinton Township**. The restoration project is located in the historic section of the Clinton Canal Park. SDA was well-represented by ten enthusiastic employees out of a total of thirty volunteers. The project entailed restoration and stabilization of approximately 2,000 ft of the existing path



between Canal Park and Budd Park on Romeo Plank Road.

June 7, 2008 was also **Clinton River Day in Troy**.

The preservation work consisted of the streambank restoration project at the Nelson Drain located on the banks of Jaycee Park in the City of Troy.



SDA OWNER'S MANUAL *cont'd.* *from Spring issue*

In our last issue, we introduced the SDA Owner's Manual. Based upon The Power of Full Engagement, by Jim Loehr and Tony Schwartz, this manual is a reminder to SDA Owners of the culture and conduct that has made SDA a great company and will continue to do so. The manual contains four engagement areas; Emotional, Spiritual, Physical, and Mental.

Excerpt of Spiritual Engagement: "As an Owner of SDA, I understand that being Spiritual has to do with how I give back to mankind and my community. Being charitable with my time and talent is the most valuable gift I can give to others."

More to come in our next issue.