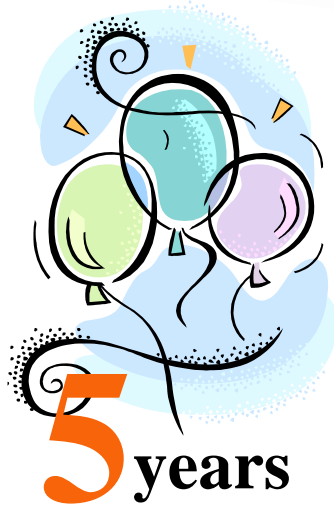


# newSplash!

## We're Celebrating 5 Years!



*We couldn't let this opportunity go by without thanking our clients, colleagues, and friends who have helped us in more ways than we can mention. We've come a long way from our first office building (11'x11') in a residential backyard to our current 1,100 SF office space in the Stoneridge Office Center in the Cedarburg Business Park. As we continue to plan our controlled growth, we are looking forward to expanding our office and staff to better accommodate our growing client base.*

*Our sincerest **THANK YOU**, from all of us at M Squared Engineering! 💧*

## General Mitchell International Airport

### M<sup>2</sup> Provides Creative Stormwater Management Options

Wet detention ponds have long been the go-to option for engineers trying to provide stormwater quantity and quality treatment. So what do you get if you remove the option of wet detention ponds from an engineer's arsenal? That is precisely the situation facing M<sup>2</sup> in one of our current projects.

M<sup>2</sup> has teamed up with Mead & Hunt to provide stormwater management as part of a runway safety area improvement project at General Mitchell International Airport (GMIA) in

Milwaukee. FAA regulations require clear graded safety areas at each runway end. Bringing GMIA's safety areas into FAA compliance necessitated the realignment of South 6th Street and construction of a vehicular tunnel for College Avenue near the airport, in addition to new and realigned airport service roads.



*"GMIA" continued on Page 3*

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## M<sup>2</sup> Adds Surveying Capability

*With the hiring of Tony Gromacki, PLS, M<sup>2</sup> has expanded our services to include in-house surveying capabilities. We can help you with many types of surveying needs: Boundary/Topographical Surveys, Construction Stake-outs, As-Builts, ALTA/ACSM Surveys, Plats, Certified Survey Maps, and more!*



## State Park Focus: Peninsula



*This is Part 2 of a series taking a look at the Wisconsin State Parks at which M<sup>2</sup> is installing shower buildings.*



With 3,776 acres, Peninsula State Park, along the bay side of Door County, is Wisconsin's third-largest State Park and easily one of the most popular. The DNR considers Peninsula "Wisconsin's most-complete park". The park opened in 1909 which means that the park will be celebrating its centennial throughout 2009.

Depending on the season, visitors can participate in activities such as hiking, biking, swimming, boating, fishing, golfing, tennis, volleyball, cross-country skiing, sledding, snowmobiling,



snowshoeing, or camping at one of the 468 campsites located throughout the park. Camping is offered year-round. Other attractions at the park include an 18-hole golf course, the historic Eagle Bluff lighthouse, a musical outdoor amphitheater, and a lookout tower offering views across the bay.

One of the most-popular attractions is Nicolet Beach located along Nicolet Bay. This offers a nice beach with a concession stand and restrooms. Next year, visitors and campers near Nicolet Beach will be able to enjoy brand new flush toilet/shower facilities. M<sup>2</sup> is working with the Wisconsin DNR and Department of Administration (DOA) to provide new flush toilet/shower building facilities to campgrounds at Peninsula and three other State Parks (Buckhorn, Kettle Moraine, and Wyalusing). Construction is slated to begin in 2009.

*For more information on Peninsula State Park, call (920) 868-3258. ♦*

## Introducing the newest additions to the M<sup>2</sup> Family

### Anthony "Tony" Gromacki,



Professional Land Surveyor, has joined the M<sup>2</sup> team. Tony will be providing comprehensive land surveying services. He has 28 years of experience in land surveying, R/W plats, construction staking, as-built drawings, boundary and topographical surveys, ALTA/ACSM surveys, plat preparation, and Certified Survey Maps. Tony has done it all!

Tony resides in Jackson, WI, with his wife of 28 years, Lynn, and two daughters, Jessica, 21, and Loni, 18. He recently sent Loni off to Mount Mary College for her freshman year, while Jessica is a senior at Wisconsin Lutheran College. When you can get him away from his total station, he likes to go hunting and fishing. ♦

### Kristine "Kris" Koepke

has also joined our M<sup>2</sup> family as our Office Manager. She comes to us with 15 years of experience in accounting/financial and has a BS in Business Administration. Her responsibilities include invoicing, bookkeeping, marketing, data entry, managing and updating our client databases, acting as a liaison between our main office and our Aurora office, and general office upkeep. Kris keeps our office running smoothly and well organized, so we can focus on what we do best—engineering and surveying!

Although Kris grew up in Door County, she now lives in Cedarburg with her husband of 21 years, Jack. They have two daughters, Katie, 17, and Sarah, 15, who attend Cedarburg High School. When she's not busy baking treats for the office, she likes to read novels, try new recipes, and spend time at the family cabin near Eagle River. ♦

## Municipal Engineering... More Than Meets the Eye!

As the most comprehensive branch of civil engineering, municipal engineering requires one to be a "jack of all trades," rather than master of one. In other words, the challenges that face our municipal engineers require quick, smart, and economic decisions and resolutions to many complex matters. In the Midwest, these problems may include anything from making sure cow manure being drained from a farm site is in accordance with WDNR guidelines, to checking to see why the speed limit on a stretch of road is different in both directions. M Squared Engineering provides comprehensive municipal engineering to the Towns of Kewaskum and Fredonia. In addition, we serve as Engineering Consultants to various communities throughout Wisconsin and Illinois. These include Milwaukee County, MMSD, Lake County, and the Villages of Grafton, Deerfield, Green Oaks, and Mundelein, to name a few.



The **Town of Kewaskum** is located in the beautiful Kettle Moraine Valley and is known for its more than 20,000 acres of glacial hills, kettles, lakes, prairie restoration sites, pinewood and hardwood forests; all with roads traveling in and around them. With the desire to live in this scenic paradise, property owners need to consider the accessibility before they start building on vacant land. One recurring issue in the Town of Kewaskum includes responding to the requests for driveway construction permits. Constructing a new driveway within the town right-of-way requires a permit and inspection. The location of the driveway must be pre-approved by the Town Engineer due to the many safety concerns. Proper sight distance is required for all new driveways and is dependent on the speed limit. The faster the speed limit, the more sight distance is required. Typically, for a speed limit of 45 mph, a minimum sight distance of 500 feet is required. This means there must be a clear vision to see oncoming traffic 500 feet in both directions of the proposed driveway. With the glacial hills and sharp bends in many of the town roadways, this is often challenging to achieve. As Town Engineers, it is our job to perform a field visit to ensure adequate sight vision is available where the landowner wants their driveway located.

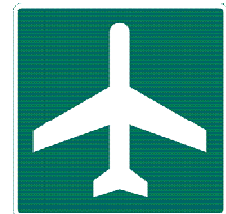


For the **Village of Grafton**, we serve as a technical expert for regulatory review and provide construction inspection of stormwater management facilities. With its rapidly expanding commercial and retail areas, the Village receives many proposed developments that are required to meet both water quality and water quantity regulations. Due to our close proximity to the project sites, we are able to quickly and efficiently respond with comments and guidance on meeting the stormwater regulations. ♦



## "GMIA" (continued from Page 1)

Due to FAA regulations, airports cannot have ponds with standing water in them due to the simple fact that wet ponds can attract wildlife. Therefore, all ponding water in Best Management Practices (BMPs), such as dry detention ponds or infiltration ponds, is required to drain within 48 hours. Another inherent restriction is the use of any sort of native vegetation that may attract wildlife. Based on these constraints, M<sup>2</sup> researched many alternative solutions for the stormwater management. Options considered included swales with ditch checks, underground storage, rain gardens, infiltration ponds, dry detention ponds, and bioretention facilities. Careful consideration is being given to find feasible stormwater management solutions for this project.



For all of our projects, M<sup>2</sup> pays close attention to finding the optimum solutions for each particular project. We constantly research new procedures or technologies, which may allow your project to become more cost-effective. ♦





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M Squared Engineering, LLC

M Squared Engineering  
W67 N222 Evergreen Blvd., Ste 106  
Cedarburg, WI 53012

Phone: (262) 376-4246  
Fax: (262) 375-2274  
E-mail: [msquared@msquaredengineering.com](mailto:msquared@msquaredengineering.com)

**newSplash!**

[www.msquaredengineering.com](http://www.msquaredengineering.com)

*...where engineering solutions meet water quality...*

## Name This Lake! (...it might win you \$50!)

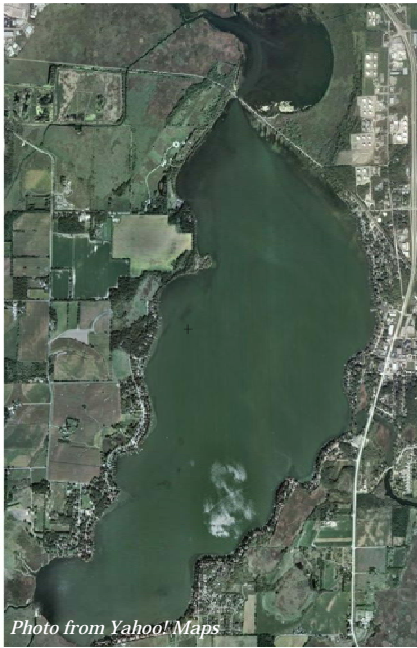


Photo from Yahoo! Maps

**As part of our five year anniversary celebration, we're giving you a chance to win!**

We refer to these lakes (shown in the picture) as "Duck Lake" because of their shape. **Identify the actual name(s) of the lake(s)** along with their location and submit your answer to **M<sup>2</sup>** for a chance to **win a \$50 Visa gift card!** One winner will be chosen at random from all of the correct entries.

Here's a hint to get you started:

***Our newest project involves performing a complex hydraulic analysis of these Wisconsin lakes.***

For more hints, or to submit your answer, please email

[NewSplash@msquaredengineering.com](mailto:NewSplash@msquaredengineering.com).

**GOOD LUCK!**

Answers will be accepted until January 16, 2009. One winner will be chosen at random from all correct answers received. Be sure to include your contact information with your entry. No purchase necessary. Void where prohibited. Objects in mirror are closer than they appear. Some assembly required. Batteries not included. May cause drowsiness. Dry clean only. One size fits all. Other restrictions may apply. ♣

***Oops! We goofed.***

*The trivia question in our last issue should have read "Does the bridge have to be designed to accommodate the weight of the ships?"*

*Comments are still being accepted at [NewSplash@msquaredengineering.com](mailto:NewSplash@msquaredengineering.com).*